

General Architecture

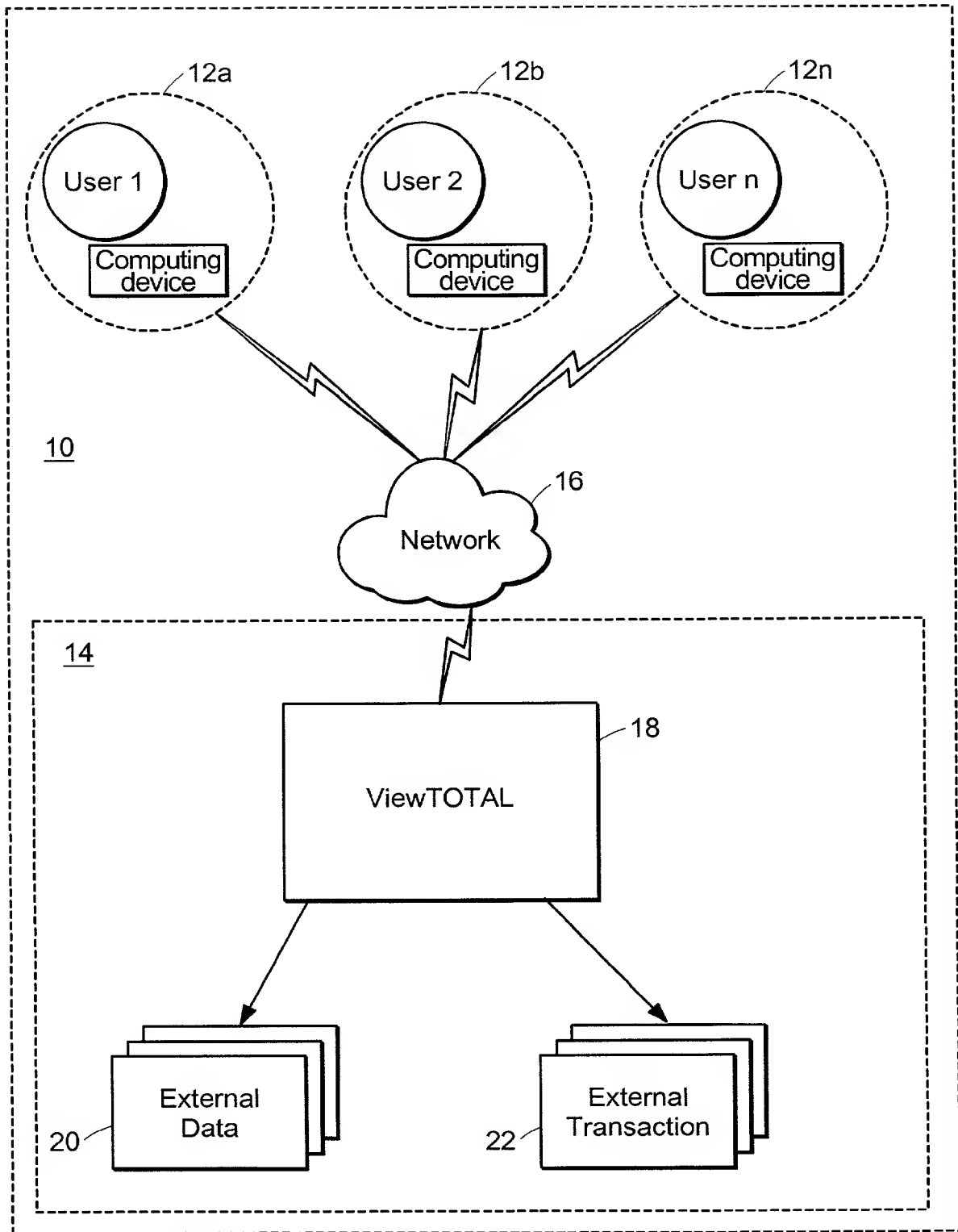


FIG. 1

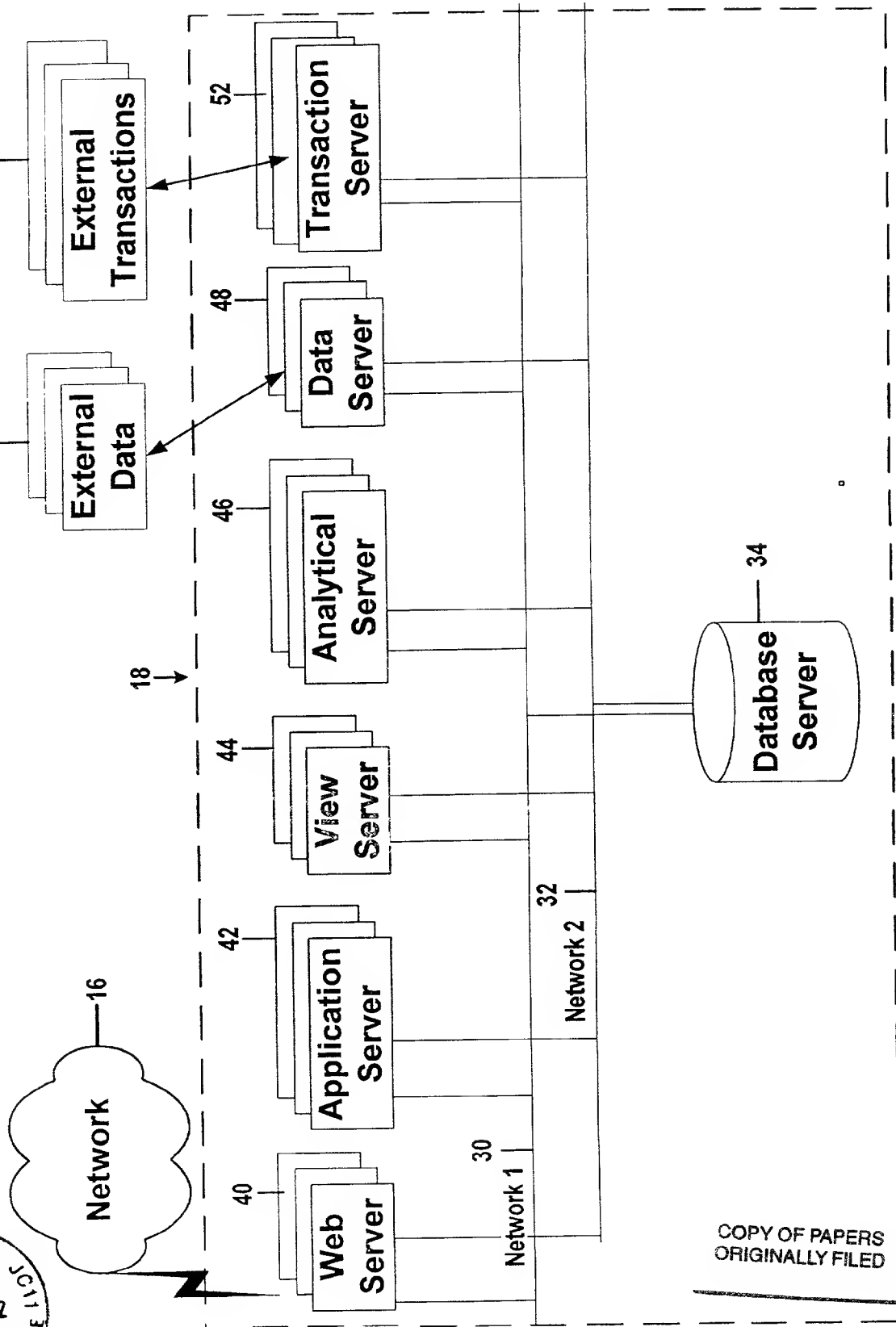
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FIG. 2

ViewTOTAL





800 →

Portfolio

Trades

Markets

Trade Entry

Logout

Account Trader Fund

Account Equities 3 Go

60 → Views: Fundamentals - ProfitLoss - Risk - By Instrument - By LongShort - By Industry - By AssetClass - By Greeks - By Counterparty

Portfolio Analysis (By instrument) Account Equities 3 As Of 11/06/2000 Copyright 2000 Unilogic, Inc. 3/64

Instrument	PriorClose	62a		62b		65		Last	Bid	Ask	Open	%Change	NetChange	Price	Short	Long	Position	ShortPosValue
		Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽	Δ ▽
AAPL	22.2500		21.4375	21.1875	21.4375	22.4375	-3.65	0.8125	21.44	0.00	0.00	0.00	0.00	0.00			0.00	
IBM	100.1250		100.3125	0.0000	0.0000	99.8750	0.19	0.1875	100.31	0.00	0.00	0.00	0.00	0.00			0.00	
Total																		

72

63

62x

Lock X

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FIG. 3



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Portfolio

Trades

Markets

Trade Entry

Logout

Views: Indices Override

Portfolio Analysis Instrument Override Account Equities 3 As Of 11/06/2000 Copyright 2000 Unilogic, Inc.

<input type="checkbox"/> Instrument	<input type="checkbox"/> Description	<input type="checkbox"/> Bid	<input type="checkbox"/> Ask	<input type="checkbox"/> Last	<input type="checkbox"/> Local Price
					Override
AAPL	Apple Computer	21.1875	21.3125	21.4375	25.0000
IBM	IBM	0.0000	0.0000	100.3125	

FIG. 4

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Before Failover

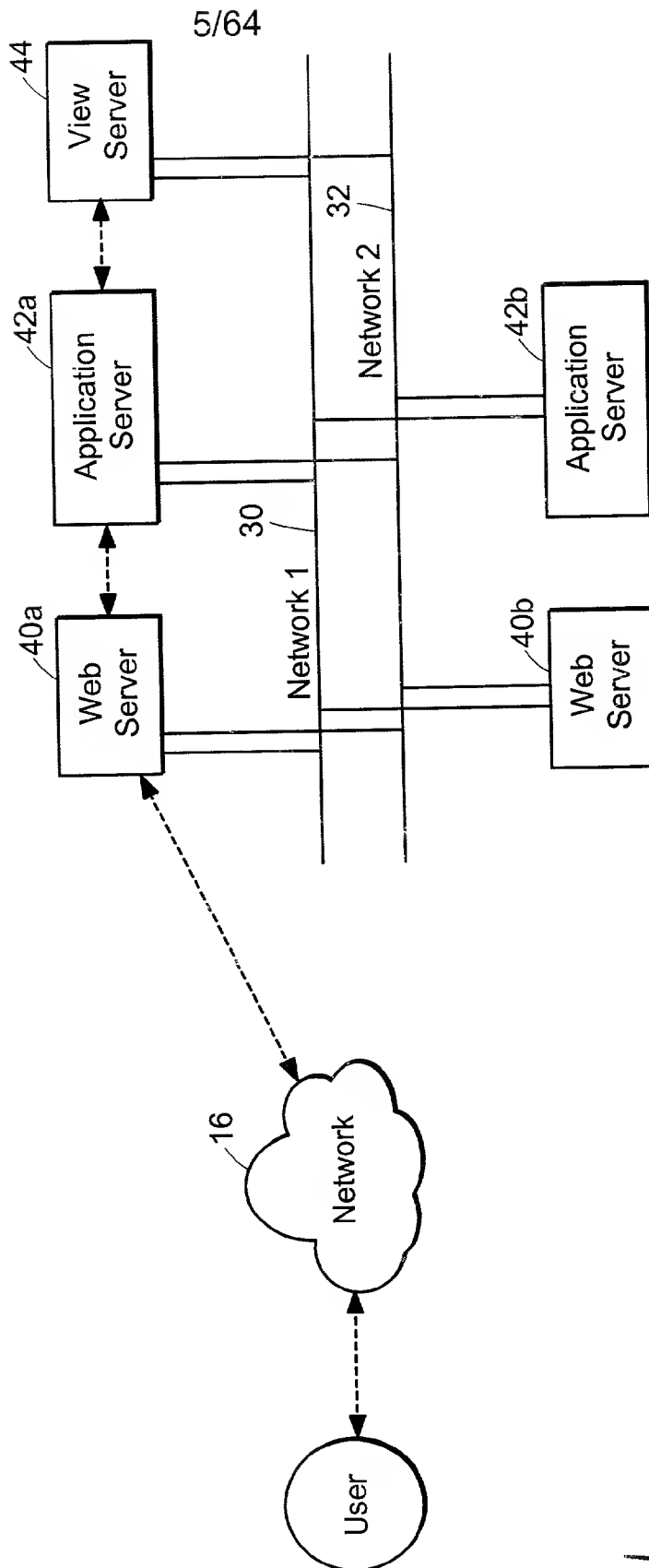


FIG. 5A

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After Failover

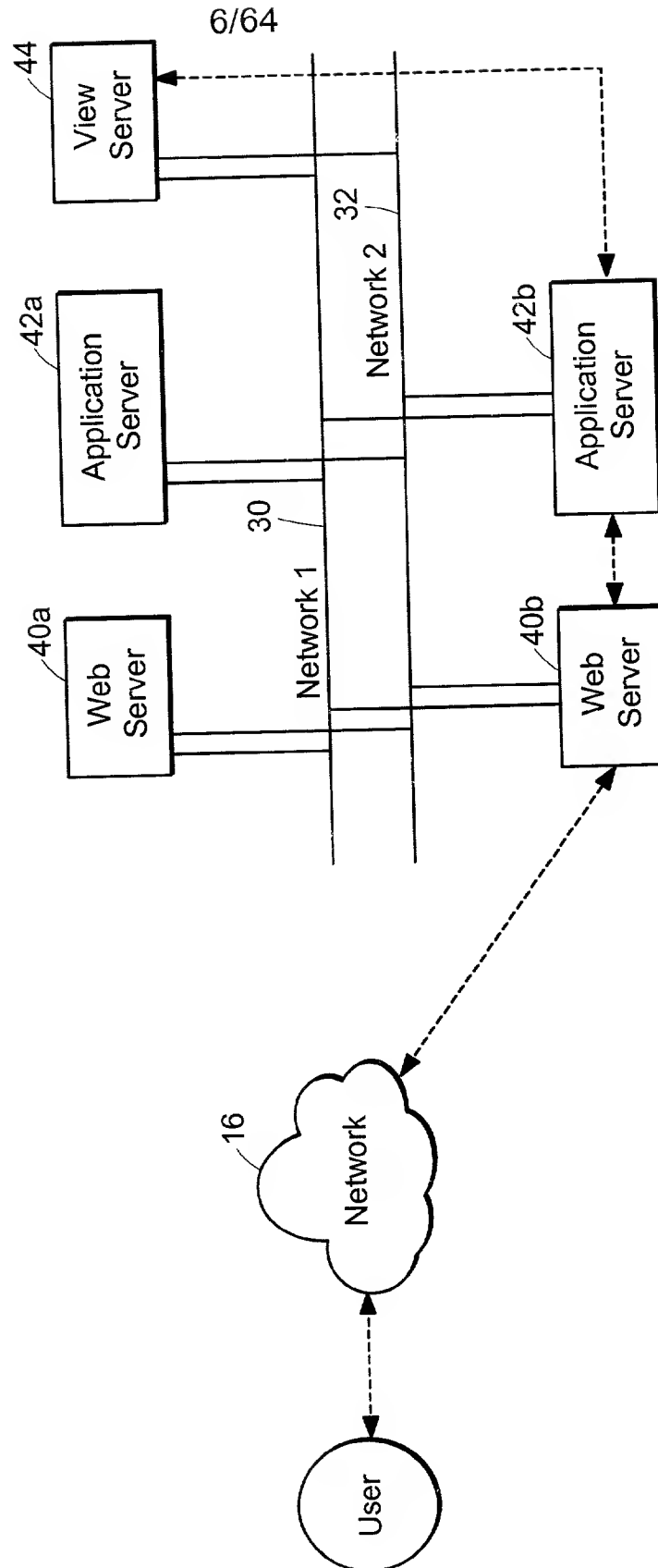


FIG. 5B

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User application view

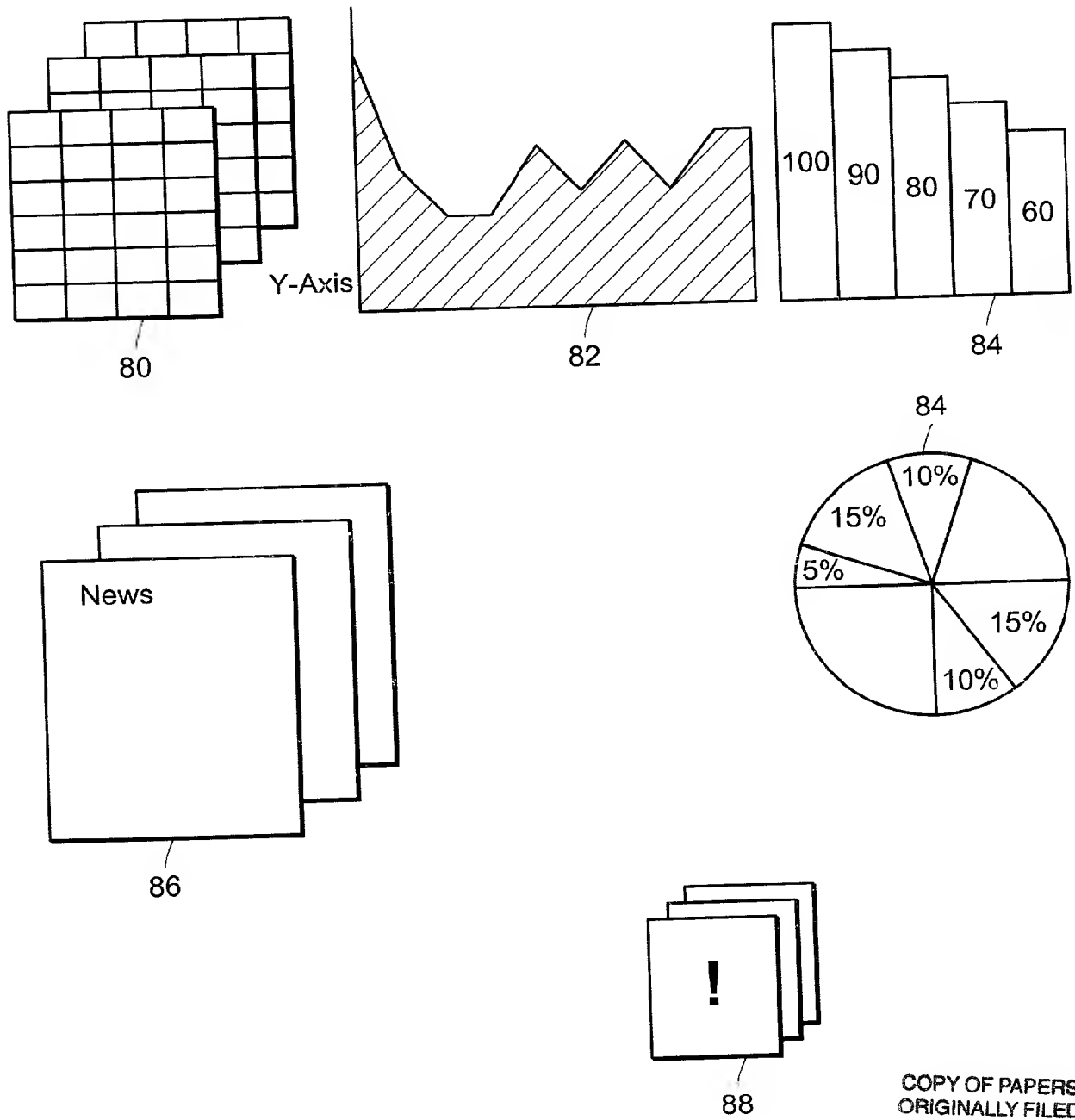


FIG. 6



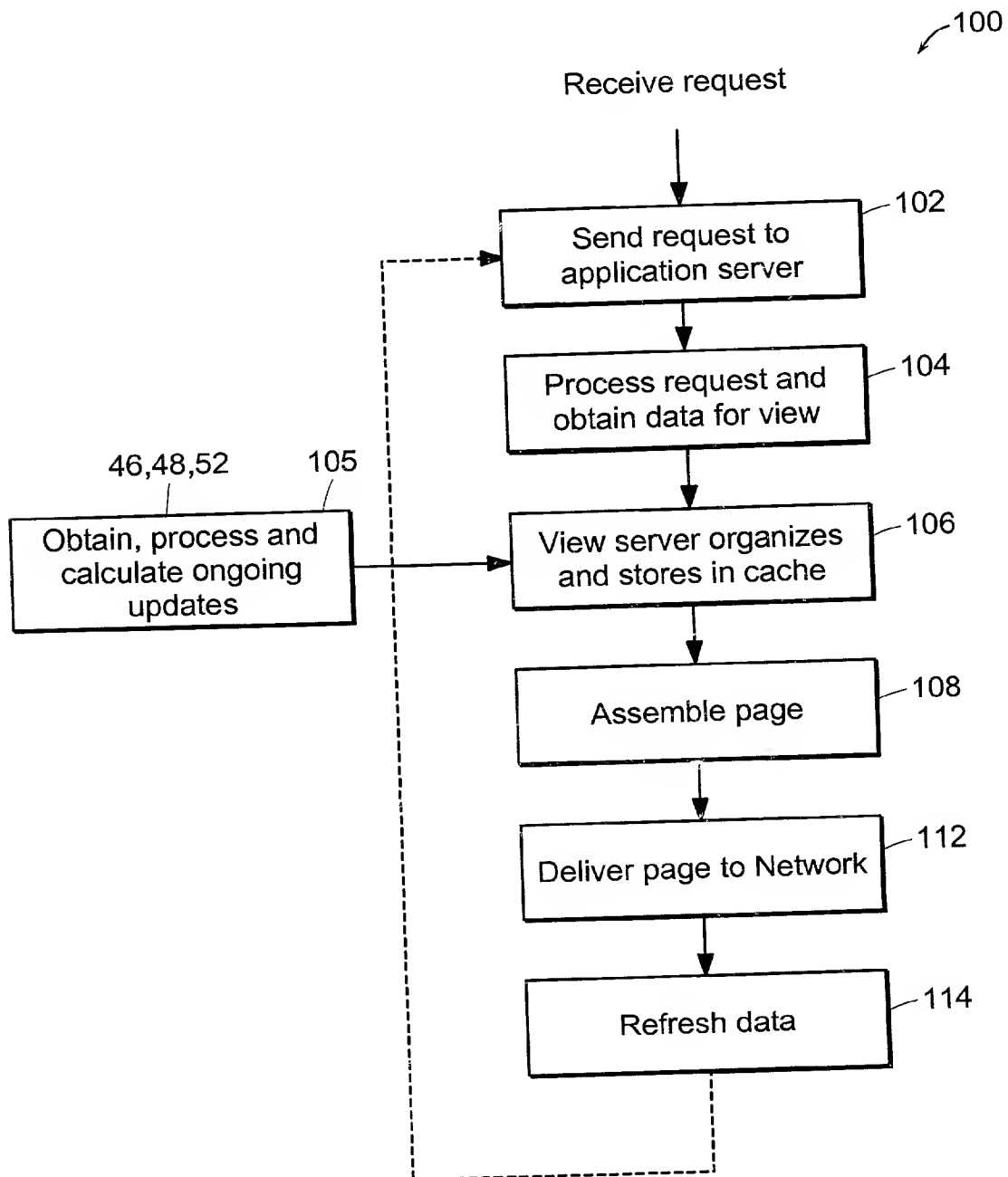


FIG. 7

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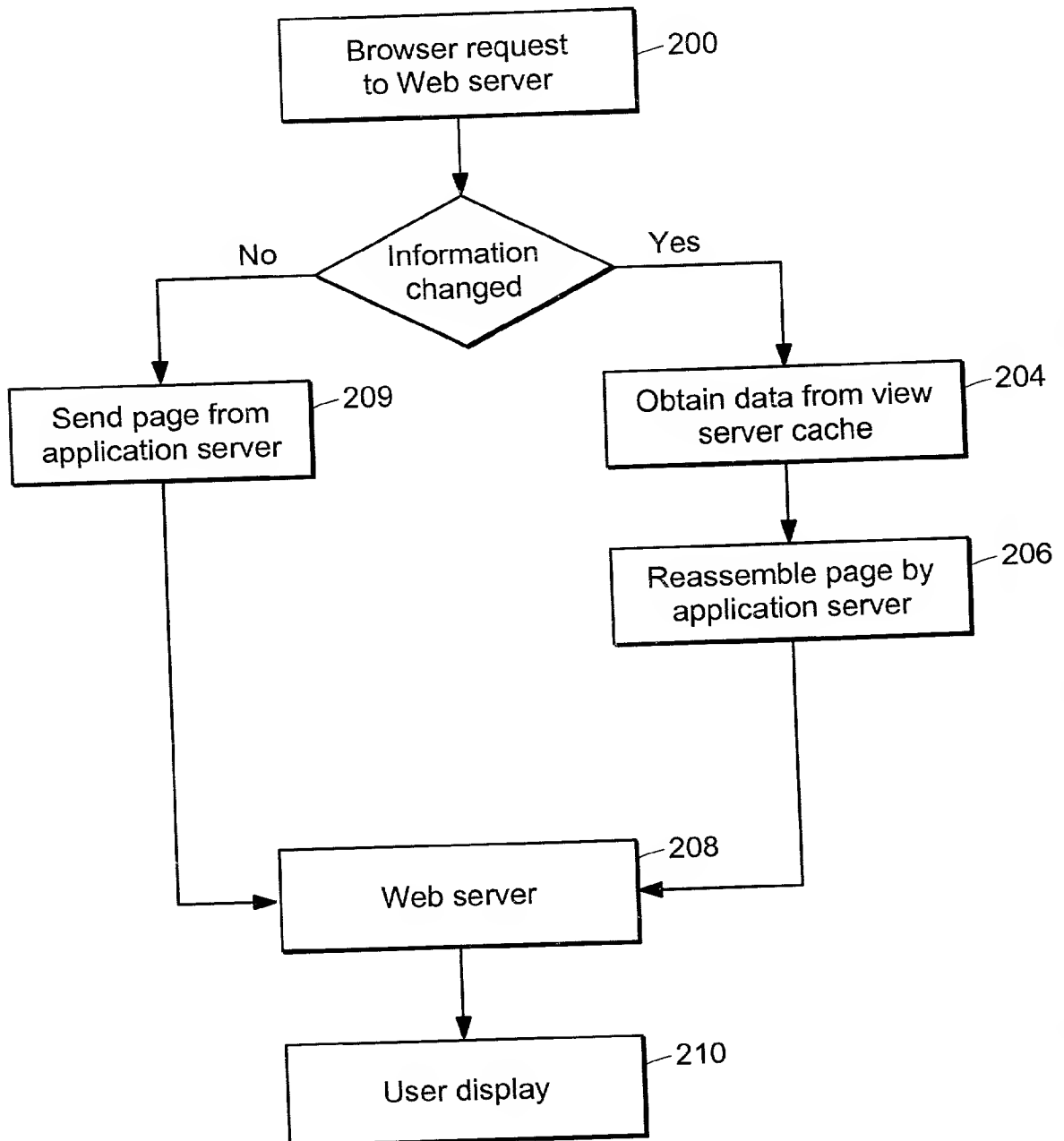


FIG. 8

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Account Trader Fund

Account

Views: Blotter - DailyBlotter - Expiration

Trade Blotter Account Equities1 As Of 11/29/2000 Copyright 2000 Unilogic, Inc.

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To modify or cancel a trade please click on arrow near TradeID

10 Monthly or calendar trades											
<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>	<input type="button" value="Δ▽"/>
TradeID	Security Name	Description	Trade Type	Trade Status	Trade Dividend	Trade Quantity	Trade Price	Security Type	Counterparty	Trade Date	Maturity
⇒ 2641	IBM	IBM	Buy	Open	0.00	1000.00	99.000	Common Stock	Bank Of America	11/06/2000	
Total											

FIG. 8A

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Portfolio

Trades

Markets

Trade Entry

Logout

Account Trader Fund

Account

Equities 1

Go

Views: Blotter - DailyBlotter - Expiration

Trade Blotter Account Equities1 As Of 11/29/2000 Copyright 2000 Unilogic, Inc.

802

Modify Trade

Cancel Trade

 803

<div>TradeID</div>	<div>Security Name</div>	<div>Description</div>	<div>Trade Type</div>	<div>Trade Status</div>	<div>Trade Dividend</div>	<div>Trade Quantity</div>	<div>Trade Price</div>	<div>Security Type</div>	<div>Counterparty</div>	<div>Trade Date</div>	<div>Maturity</div>
2641	IBM	IBM	Buy	Open	0.00	1000.00	99.000	Common Stock	Bank Of America	11/06/2000	
Total											

FIG. 8B

Portfolio

Trades

Markets

Trade Entry

Logout

Are you sure to Modify trade 2641?

Yes

No

FIG. 9

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Portfolio Trades Markets Trade Entry Logout

Choose Security Type Equity Go

Equity Trade Entry

☒ Buy ☐ Sell ☐ Short ☐ Buy To Cover

Account	Equities1
Amount	1000.00
Equity	IBM
Trade Price	99.000
Counterparty	BankOfAmerica
Commission	50.00
Trade Date	11/06/2000
Hedge	<input type="checkbox"/>
Trade ID	2641
submit	

FIG. 10

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Portfolio

Trades

Markets

Trade Entry

Logout

Account Trader Fund

Account

Currencies1

Go

Views: Fundamentals - ProfitLoss - Risk - By Allocation - By AssetClass - By Counterparty - By Country - By Currency - By Industry - By Instrument - By LongShort } 1000

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Portfolio Analysis (By Country) Account Currencies1 As Of 11/26/2000 Copyright 2000 Unilogic, Inc.

Country	Spot	ShortPosValue	LongPosValue	PosValue	UnrealizedP/L		RealizedP/L	
					OTD		OTD	
USA	1.0000	0.00	29,700.00	29,700.00	-1,300.00		0.00	
Japan	112.0000	0.00	32,428.57	32,428.57	-4,911.43		0.00	
Total		0.00	62,128.57	62,128.57	-6,211.43		0.00	

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FIG. 11



Portfolio

Trades

Markets

Trade Entry

Logout

Detail Portfolio Analysis (By Country-Japan) Account Currencies1 As Of 11/26/2000 Copyright 2000 Unilogic, Inc.

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Instrument	Local	Currency	Maturity	Position	PosValue	UnrealizedP/L		RealizedP/L	
						OTD		OTD	
	Price								
EWJ	11.75	USD		2,000.00	23,500.00	-4,760.00		0.00	
Japanese_Yen	112.00	Japanese_Yen		1,000,000.00	8,928.57	-161.43		0.00	
Total					32,428.57	-4,911.43		0.00	

Refresh Detail

Back To Aggregate View

FIG. 12

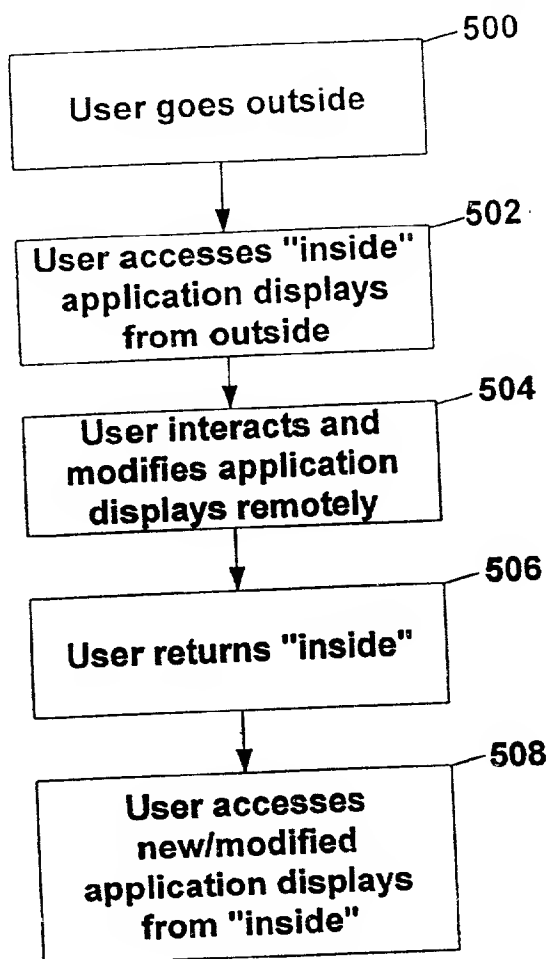


FIG. 13

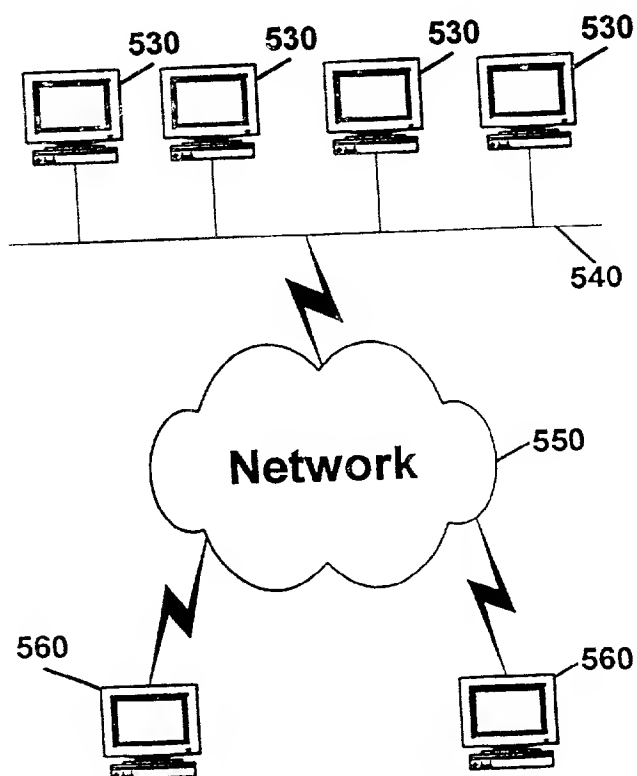


FIG. 14

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Configure

Logout

Account Trader Fund

Account	Currencies1	Go
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Views: Fundamentals - ProfitLoss - Risk - By Allocation - By AssetClass - By Counterparty - By Country - By Currency - By Industry - By Instrument - By LongShort - By Greeks

600 Portfolio Analysis (By AssetClass) Account Currencies1 As Of 05/22/2001

AssetClass	ShortPosValue	LongPosValue	PosValue	%PosValue	UnrealizedP/L	RealizedP/L
					OTD	OTD
☐ Currencies	-884,642.60	0.00	-884,642.60	25.53	-44,642.60	0.00
☐ Options	0.00	55,000.00	55,000.00	1.59	29,000.00	0.00
☐ Equities	-490,350.00	2,082,630.00	1,592,280.00	72.89	1,179,175.00	0.00
Total	-1,374,992.60	2,137,630.00	762,637.40	100.00	1,163,532.40	0.00

FIG. 15

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AssetClass	ShortPosValue	LongPosValue	PosValue	%PosValue	UnrealizedP/L	RealizedP/L
Currencies	-884,779.58	0.00	-884,779.58	25.53	-44,779.58	0.00
Options	0.00	55,000.00	55,000.00	1.59	29,000.00	0.00
Equities	-490,350.00	2,082,630.00	1,592,280.00	72.88	1,179,175.00	0.00
Total	-1,375,129.58	2,137,630.00	762,500.42	100.00	1,163,395.42	0.00

FIG. 16



Portfolio

Trades

Curves

Markets

Trade Entry

Configure

Logout

Account Trader Fund

Account

Currencies1

Go

Views: Fundamentals - ProfitLoss - Risk - By Allocation - By AssetClass - By Counterparty - By Country - By Currency - By Industry - By Instrument - By LongShort - By Greeks

Portfolio Analysis (By AssetClass) Account Currencies1 As Of 05/22/2001

AssetClass	ShortPosValue	LongPosValue	PosValue	%PosValue	UnrealizedP/L	RealizedP/L
Currencies	-884,897.02	0.00	-884,897.02	25.53	-44,897.02	0.00
Options	0.00	55,000.00	55,000.00	1.59	29,000.00	0.00
Equities	-490,350.00	2,082,630.00	1,592,280.00	72.88	1,179,175.00	0.00
Total	-1,375,247.02	2,137,630.00	762,382.98	100.00	1,163,277.98	0.00

Selected Column

FIG. 17



Portfolio

Trades

Curves

Markets

Trade Entry

Configure

Logout

Account Trader Fund

Account

Currencies1

Go

Views: Fundamentals - ProfitLoss - Risk - By Allocation - By AssetClass - By Counterparty - By Country - By Currency - By Industry - By Instrument - By LongShort - By Greeks

Portfolio Analysis (By AssetClass) Account Currencies1 As Of 05/22/2001

AssetClass	LongPosValue	PosValue	ShortPosValue	%PosValue	UnrealizedP/L		RealizedP/L	
					OTD		OTD	
Currencies	0.00	-884,779.58	-884,779.58	25.53	-44,779.58		0.00	
Options	55,000.00	55,000.00	0.00	1.59	29,000.00		0.00	
Equities	2,082,630.00	1,592,280.00	-490,350.00	72.88	1,179,175.00		0.00	
Total	2,137,630.00	762,500.42	-1,375,129.58	100.00	1,163,395.42		0.00	

Selected Column

FIG. 18

Account Trader Fund

Account Currencies1 Go

Views: Fundamentals - ProfitLoss - Risk - By Allocation - By AssetClass - By Counterparty - By Country - By Currency - By Industry - By Instrument - By LongShort - By Greeks

Portfolio Analysis (By AssetClass) Account Currencies1 As Of 05/22/2001

AssetClass	LongPosValue	PosValue	ShortPosValue	%PosValue	UnrealizedP/L	RealizedP/L
Currencies	0.00	-885,779.58	-885,249.53	25.54	-44,249.53	0.00
Options	55,000.00	55,000.00	0.00	1.59	29,000.00	0.00
Equities	2,082,630.00	1,592,280.00	-490,350.00	72.87	1,179,175.00	0.00
Total	2,137,630.00	762,500.47	-1,375,599.53	100.00	1,162,925.47	0.00

Chart Type: Bar - HorizontalBar - Pie %PosValue vs AssetClass

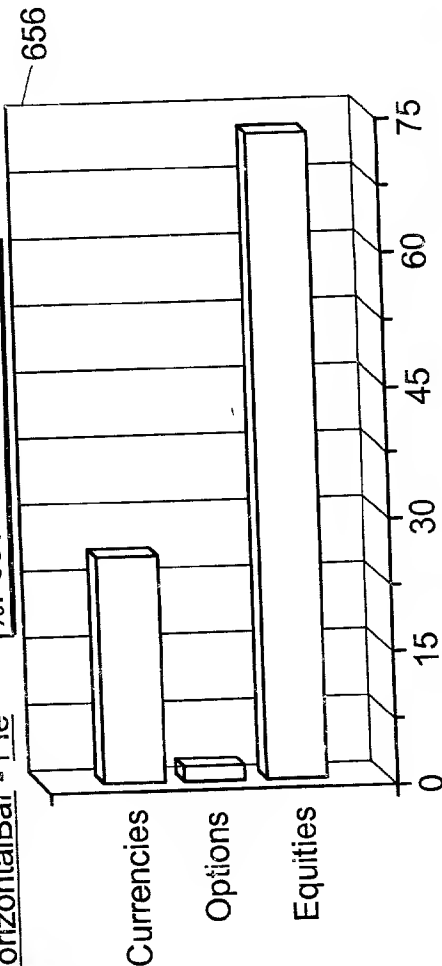


FIG. 19



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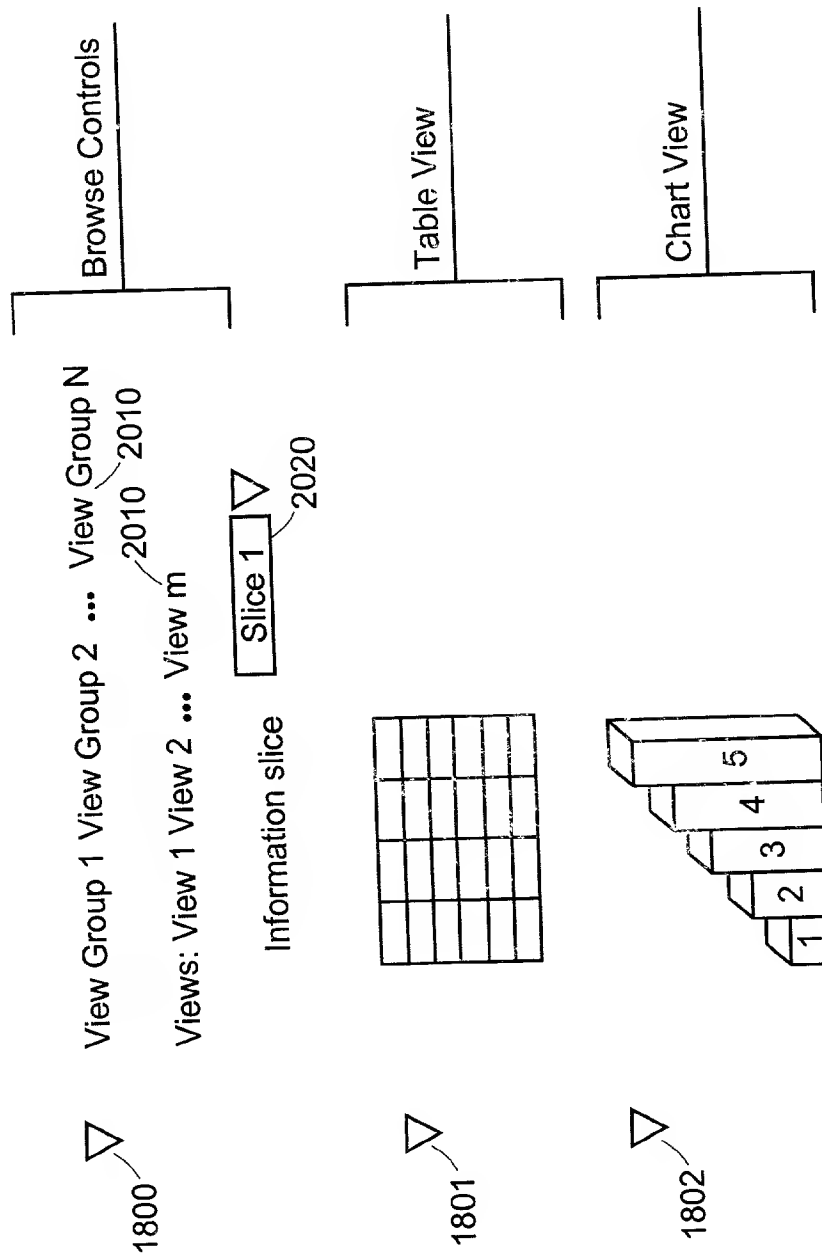


FIG. 20A

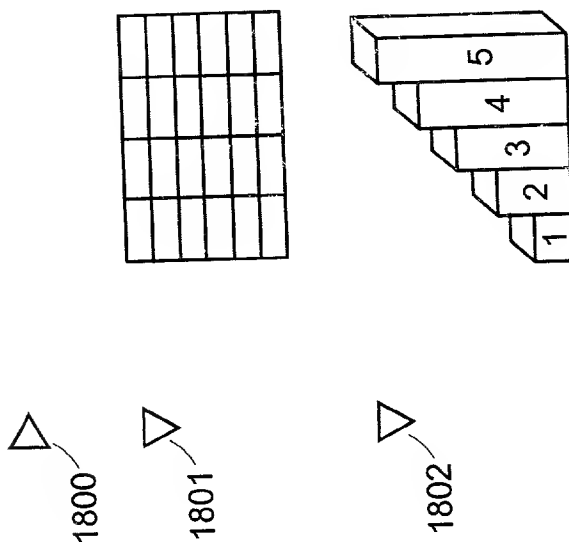
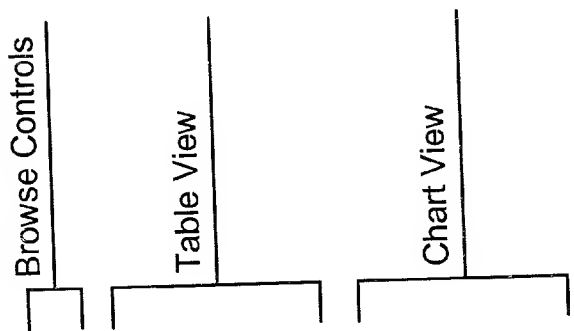
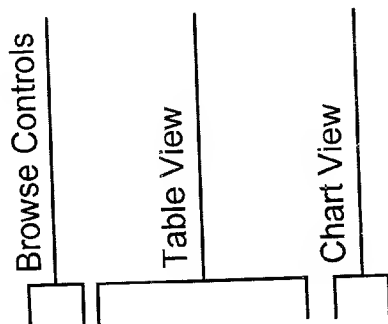


FIG. 20B



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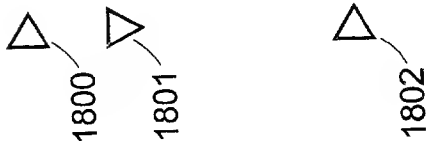
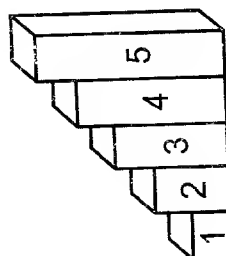
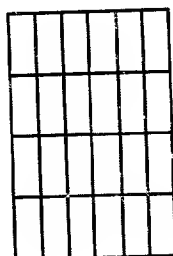
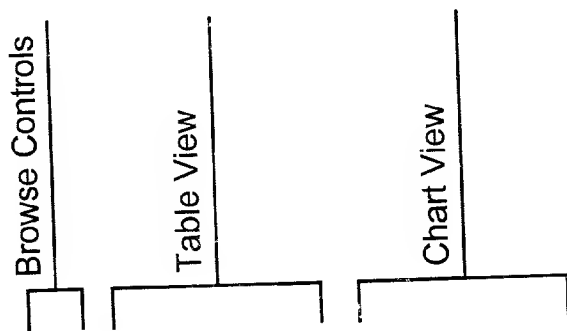


FIG. 20C





1800

1801

1802

FIG. 20D



HTML Based Application

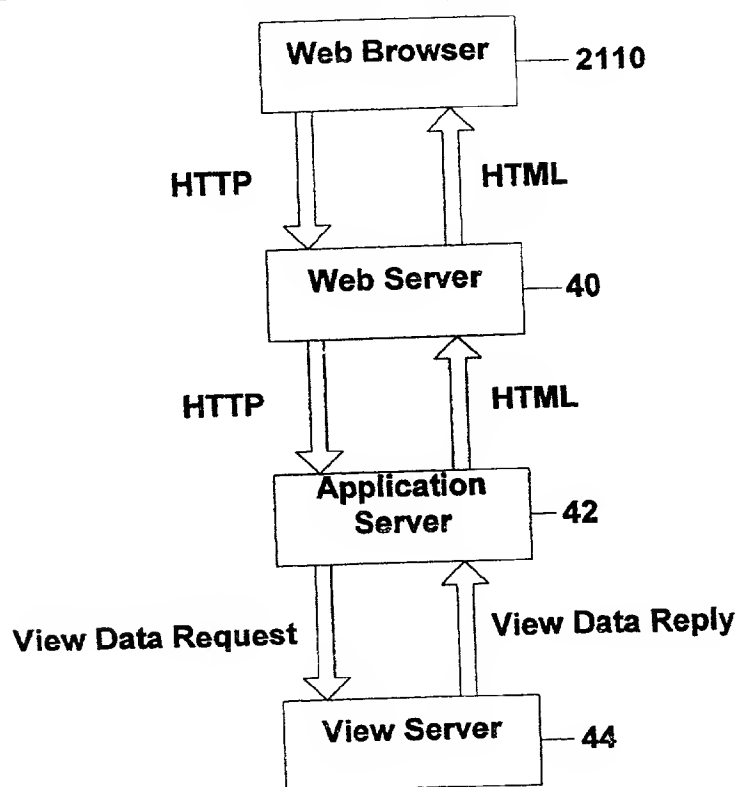


FIG. 21



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Browser Based Client (Java, C#,...) Application

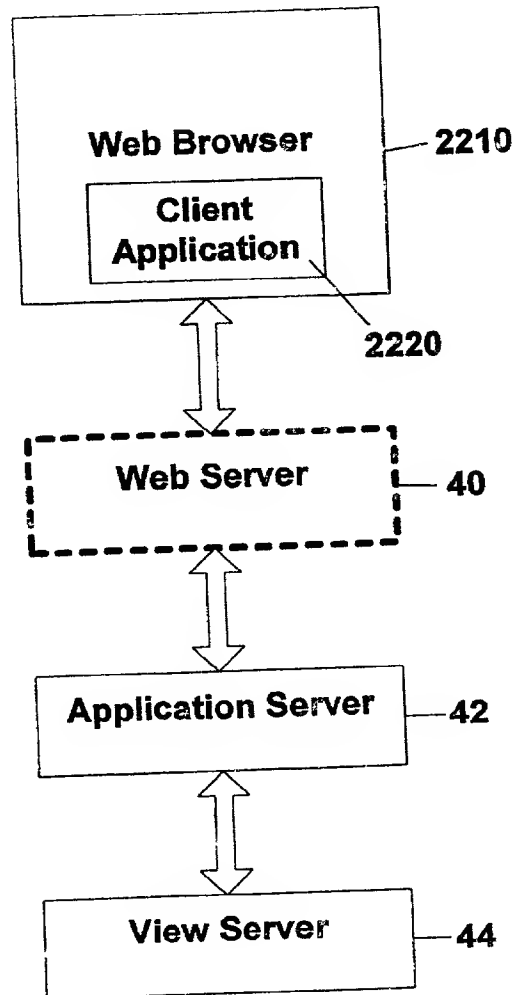


FIG. 22

Local Client (Java, C#,C++,...) Application

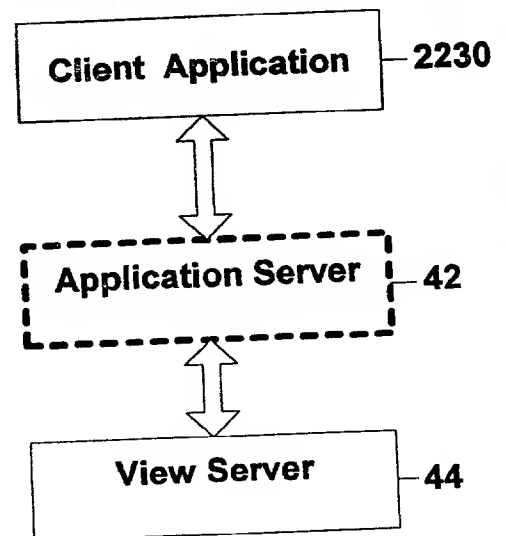


FIG. 22A

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20220758560

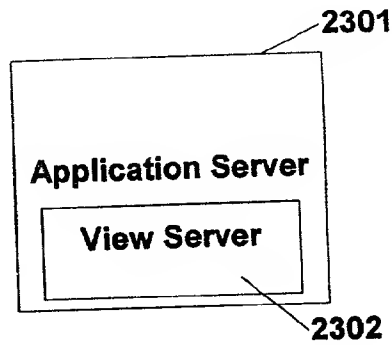


FIG. 23A

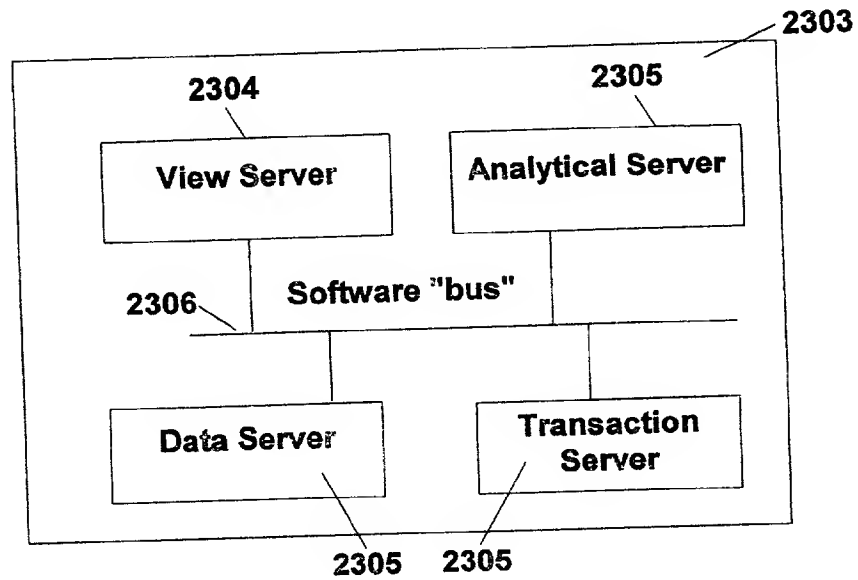


FIG. 23B

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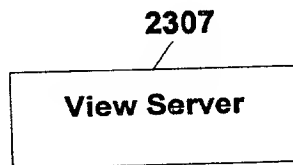
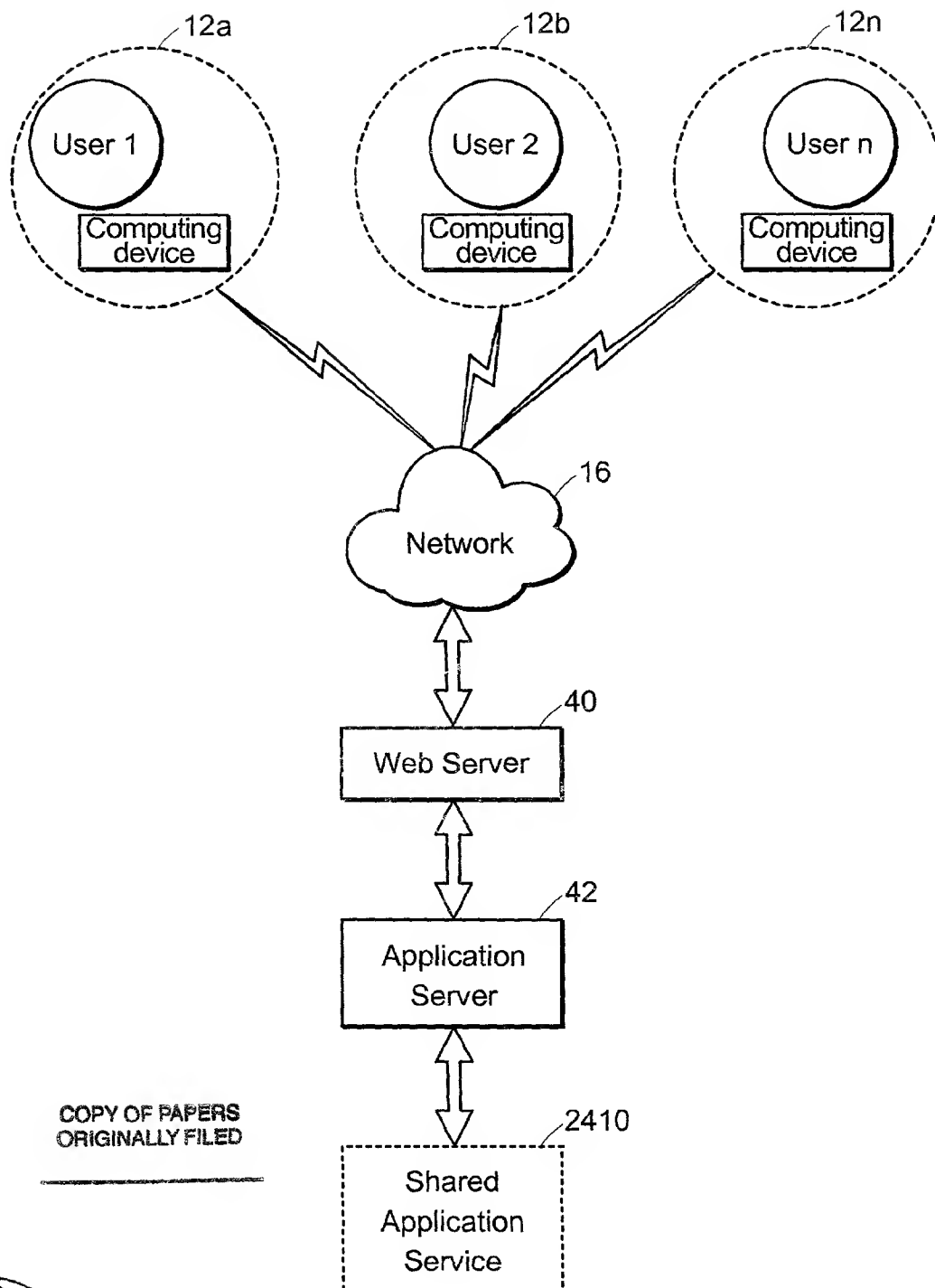


FIG. 23C



HTML based shared application service



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FIG. 24A



Browser based client (Java, C#, ...) using shared application service

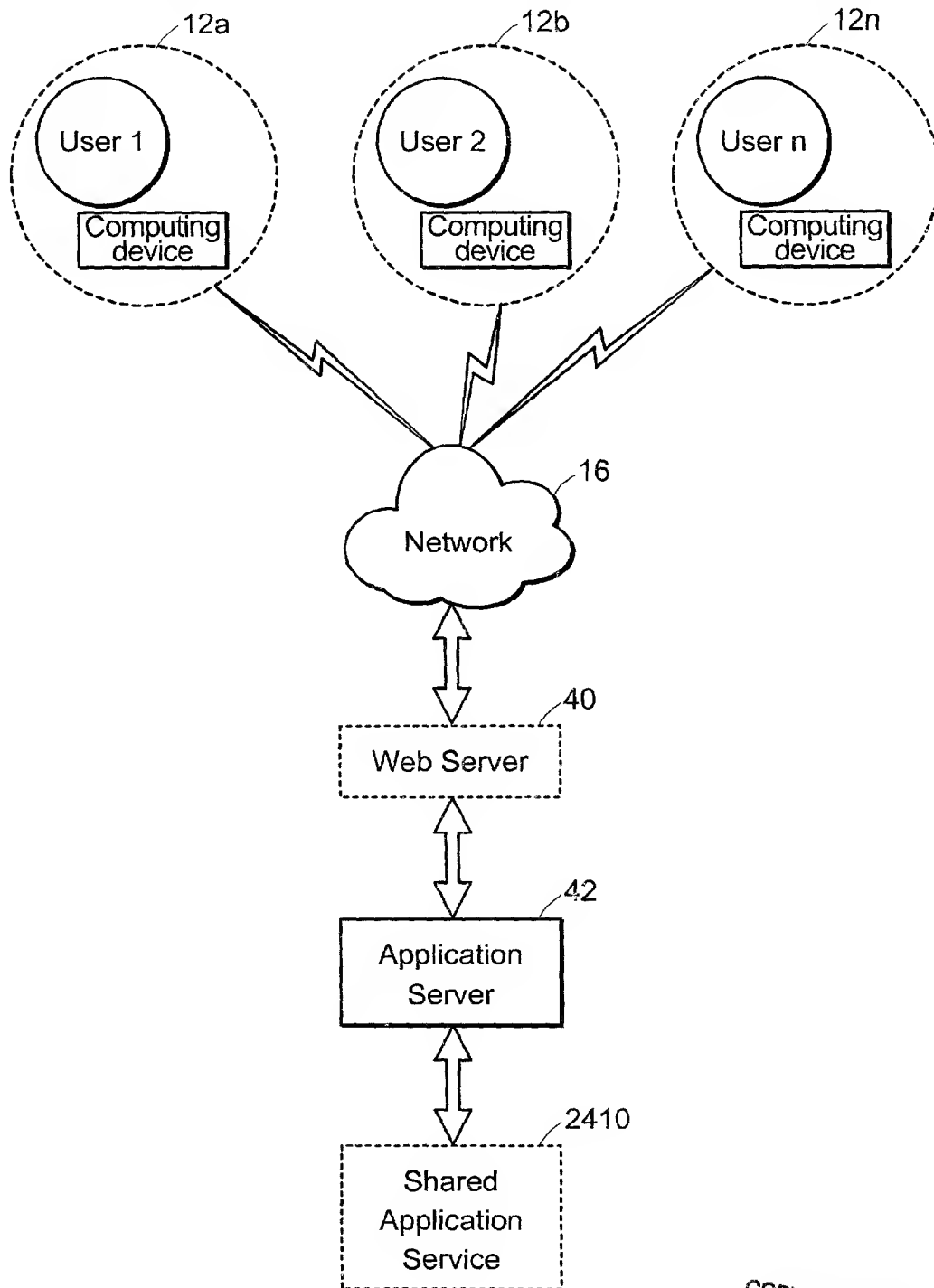


FIG. 24B

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Local client (Java, C#, C++,...) using shared application service

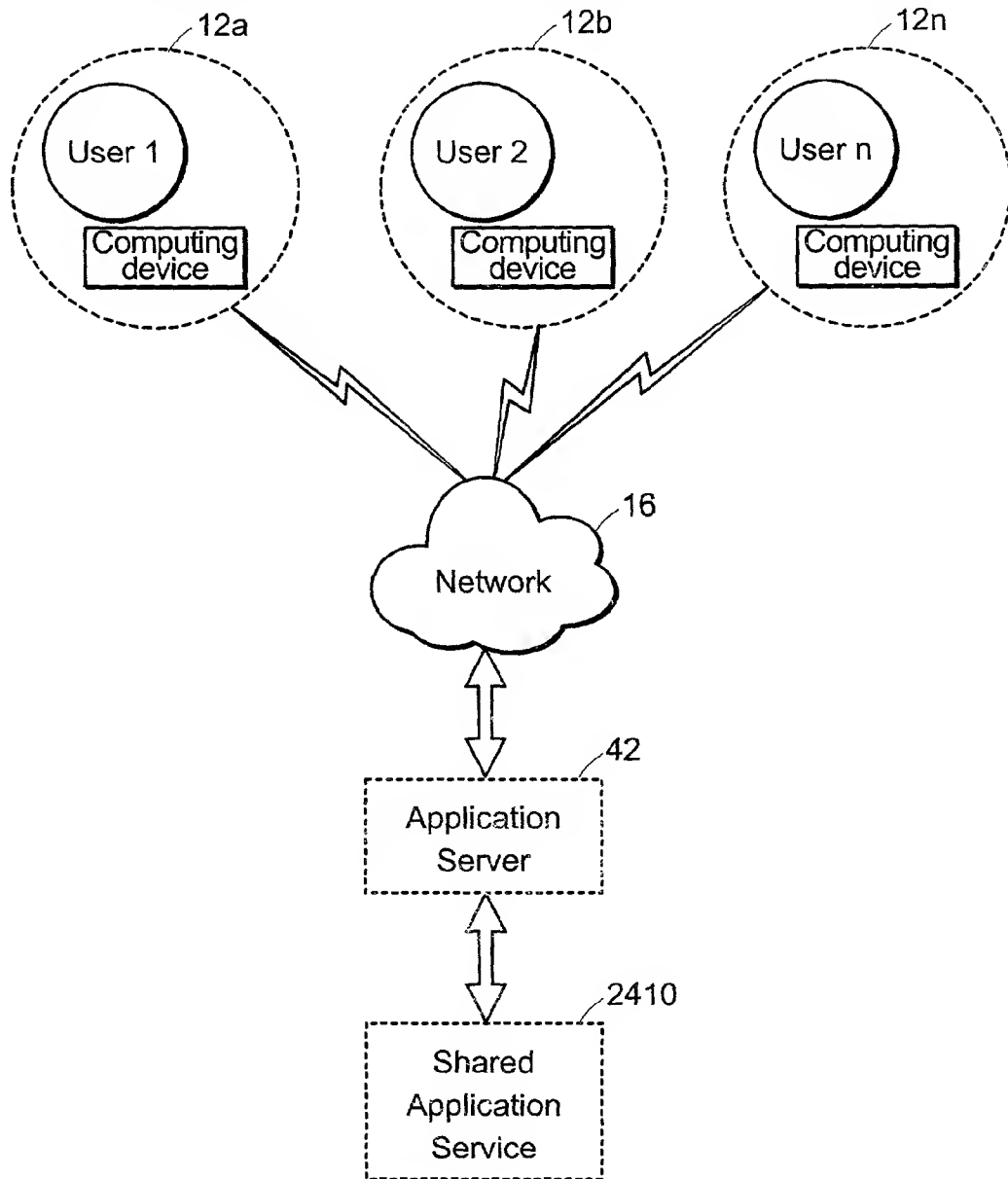


FIG. 24C

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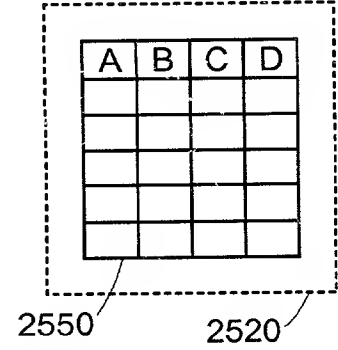
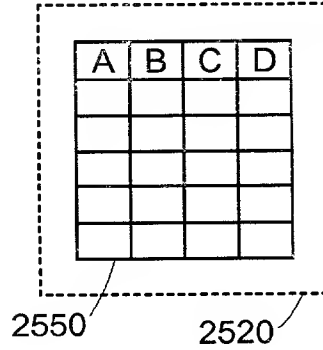
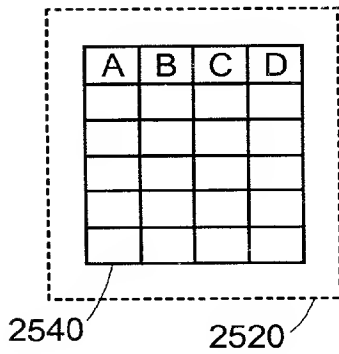
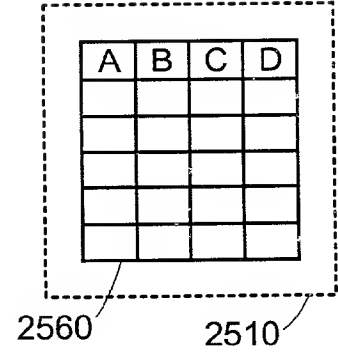
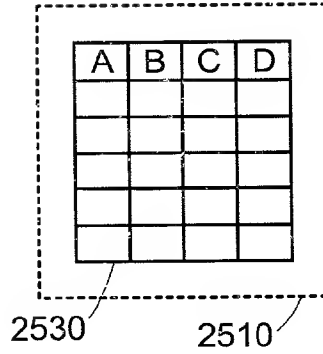
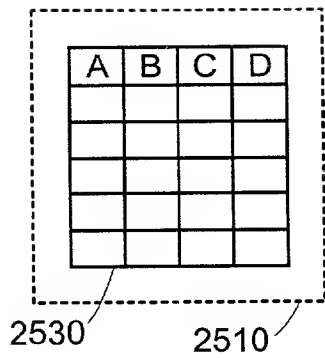


FIG. 25A

FIG. 25B

FIG. 25C

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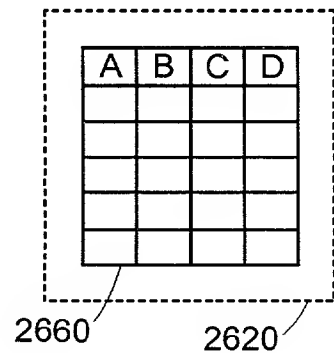
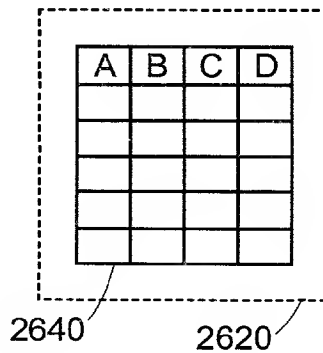
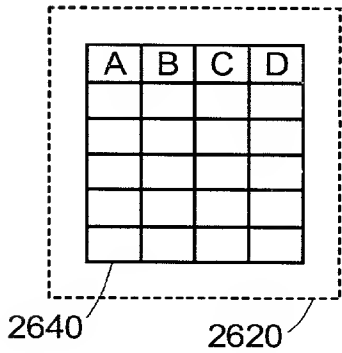
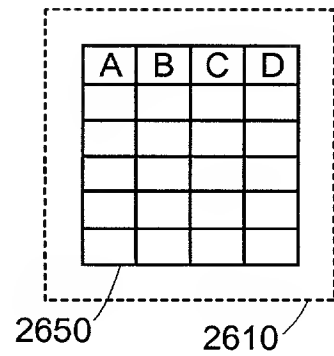
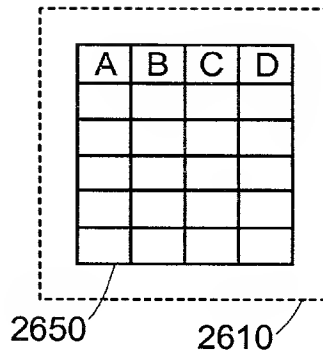
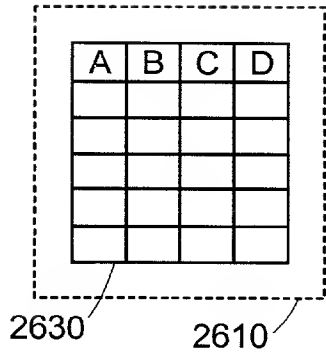


FIG. 26A

FIG. 26B

FIG. 26C



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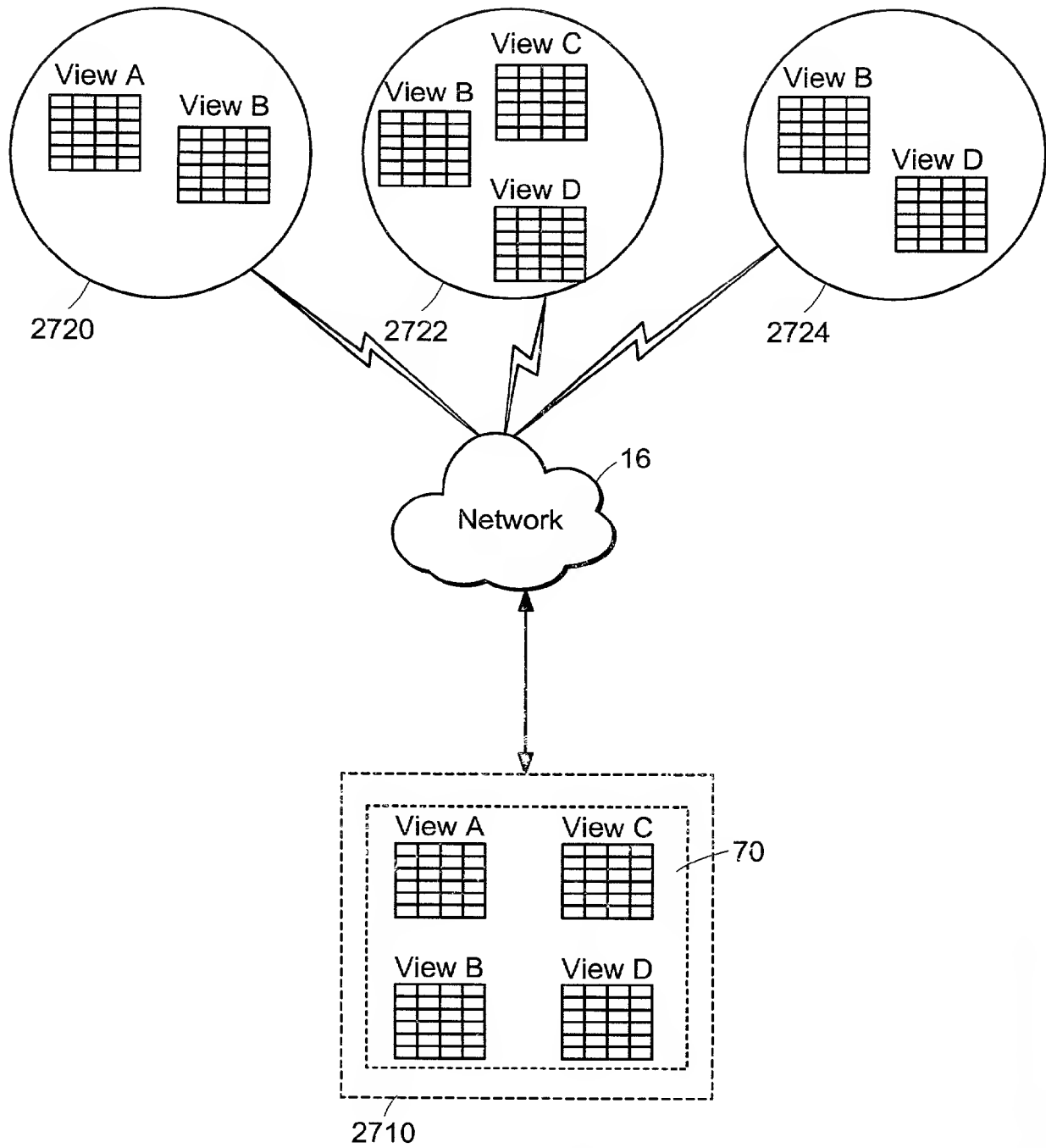


FIG. 27



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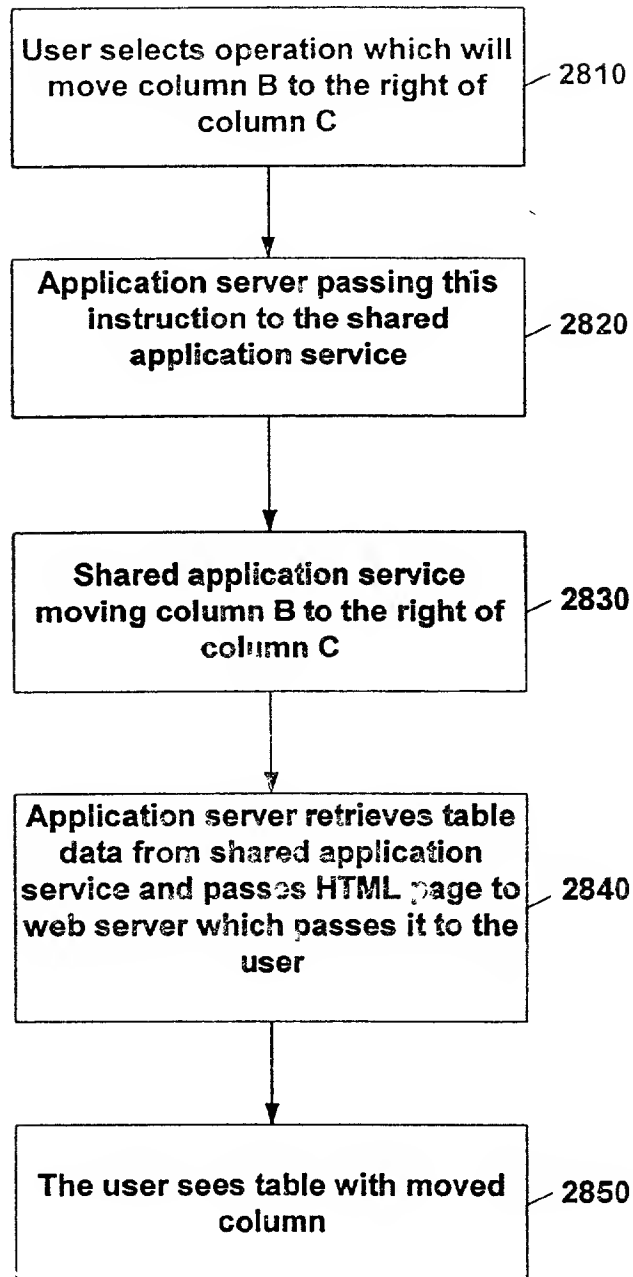


FIG. 28



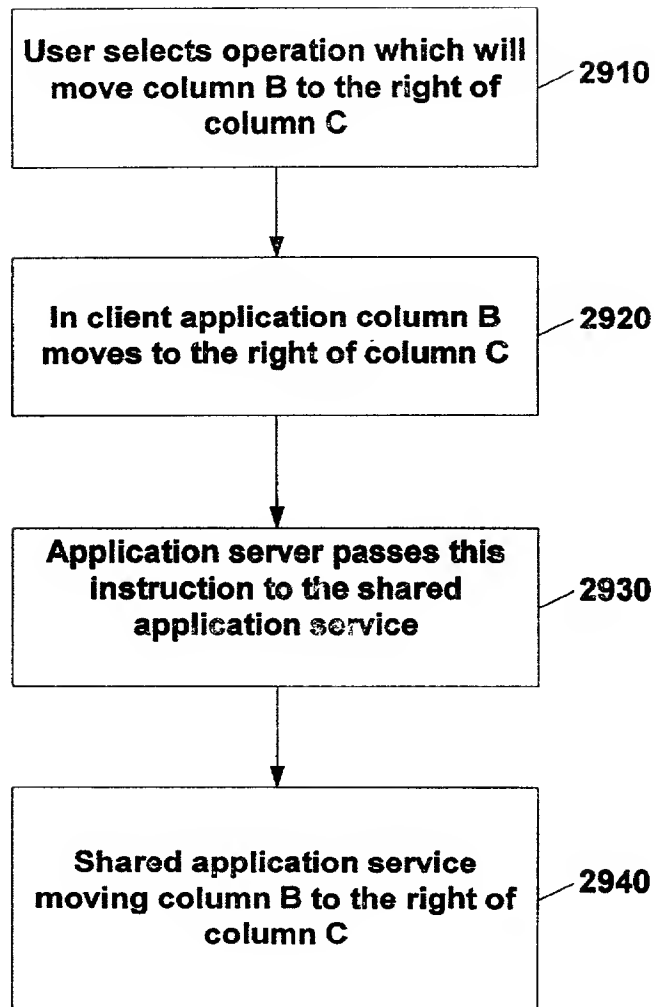
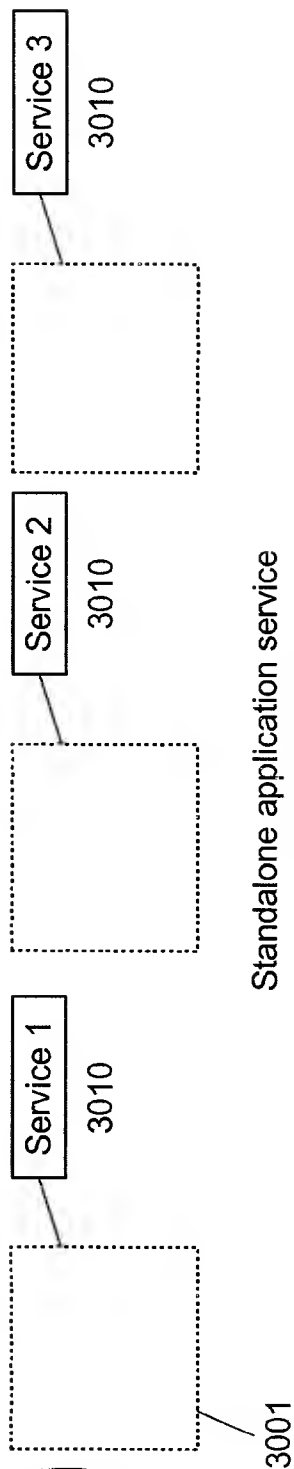


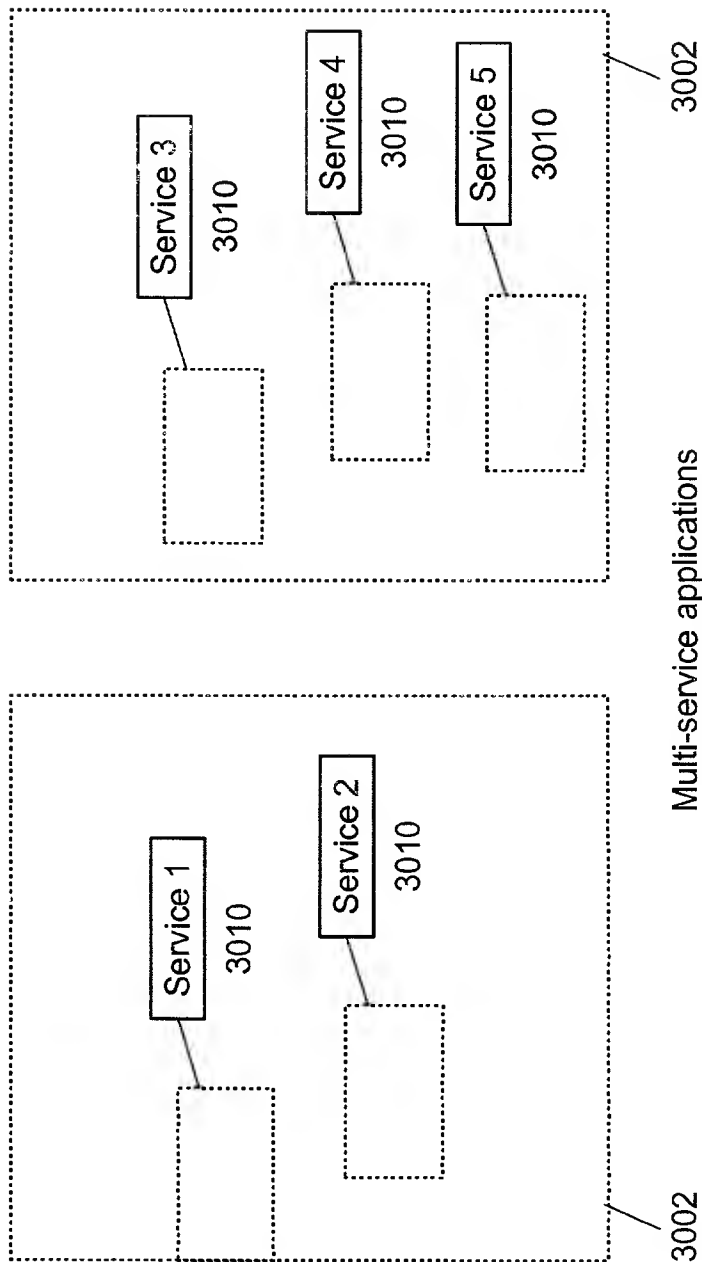
FIG. 29





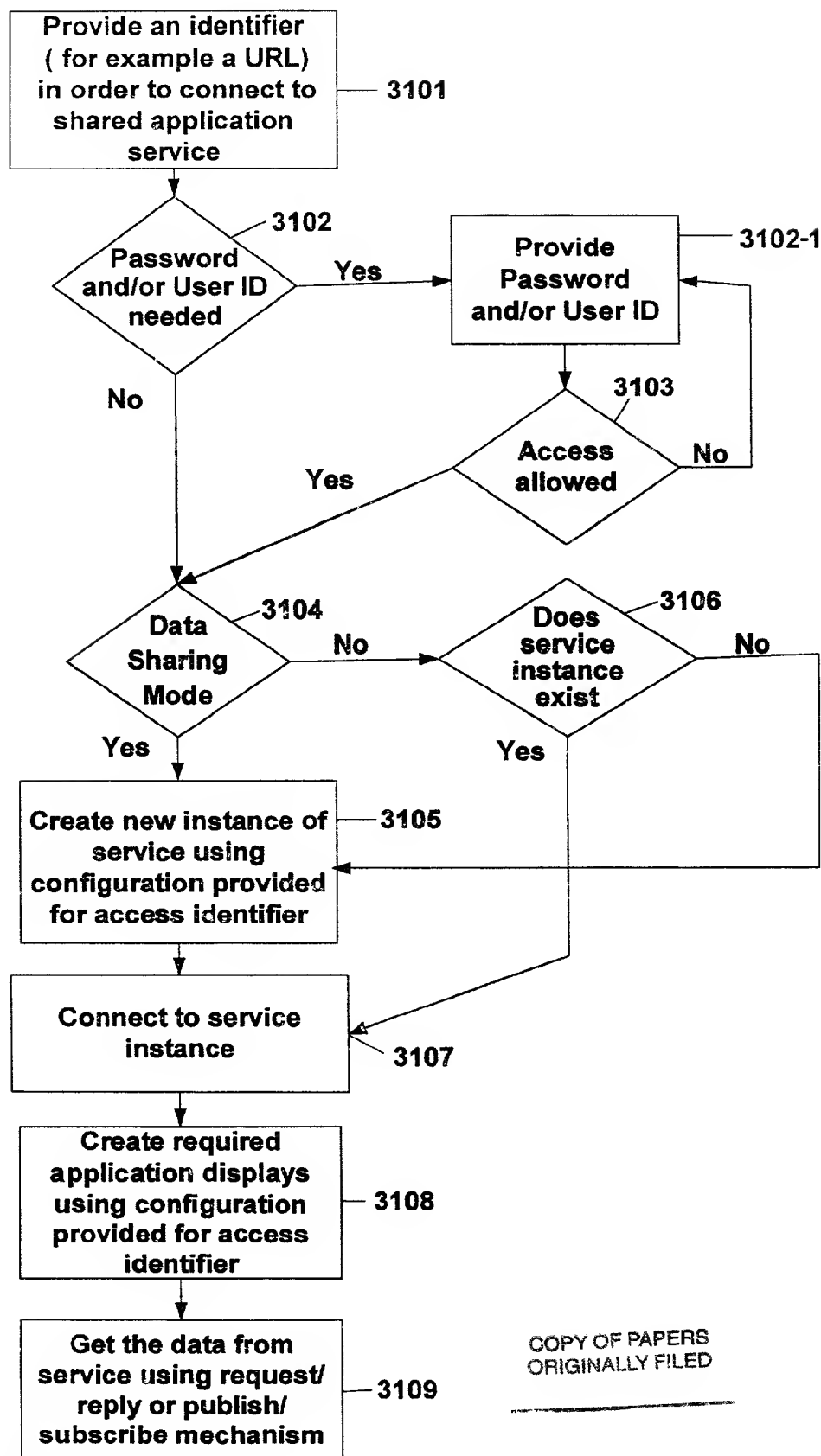
Standalone application service

FIG. 30A



Multi-service applications

FIG. 30B



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FIG. 31-1

Continued on
FIG 31-2



2002/07/23 15:55:50

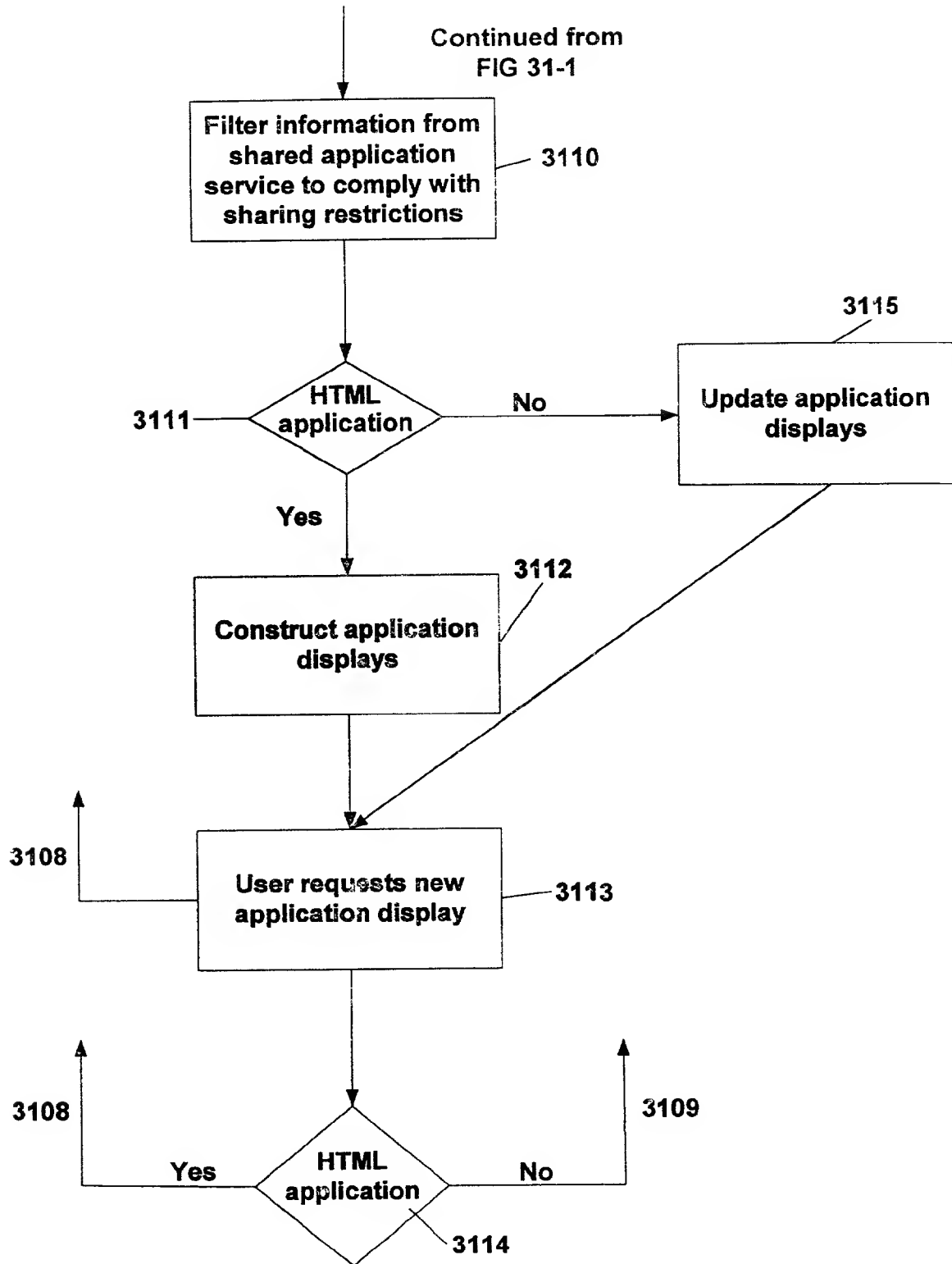


FIG. 31-2



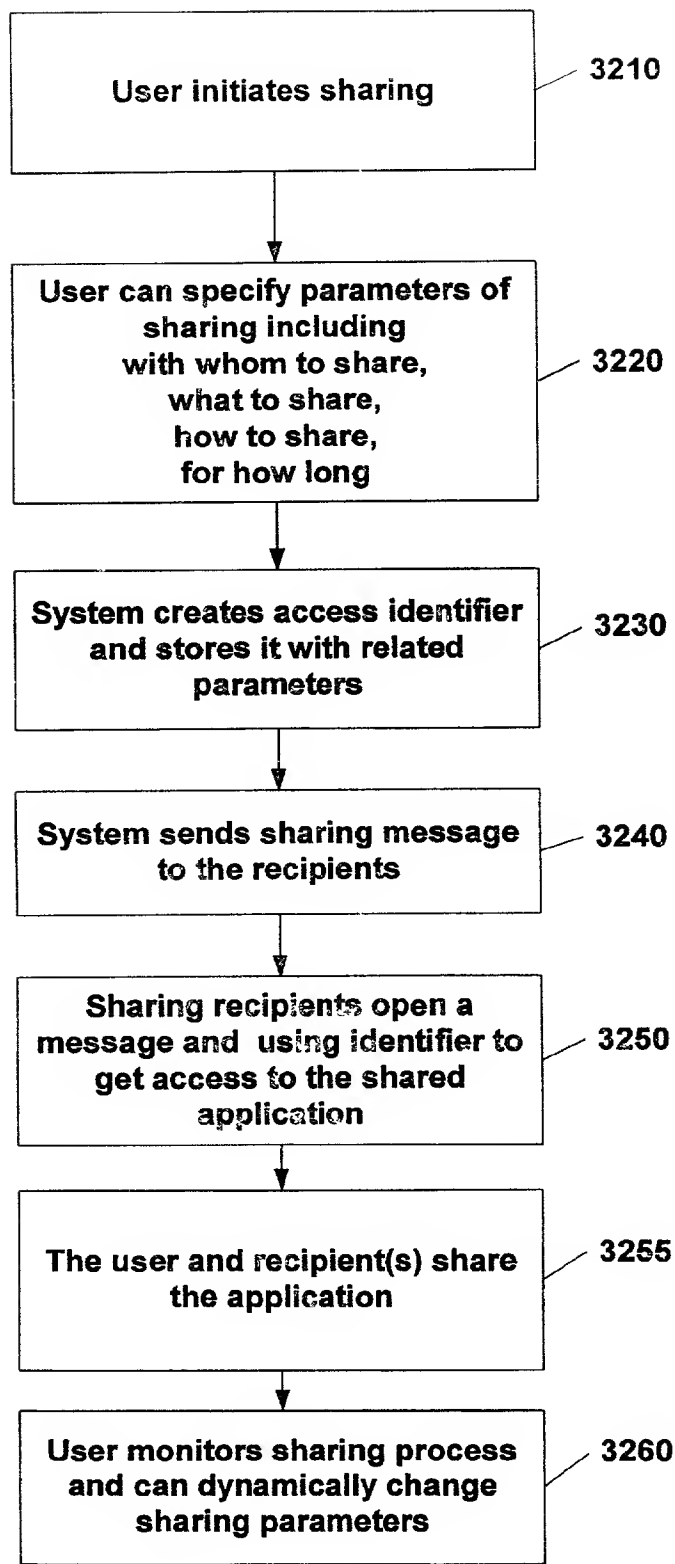


FIG. 32



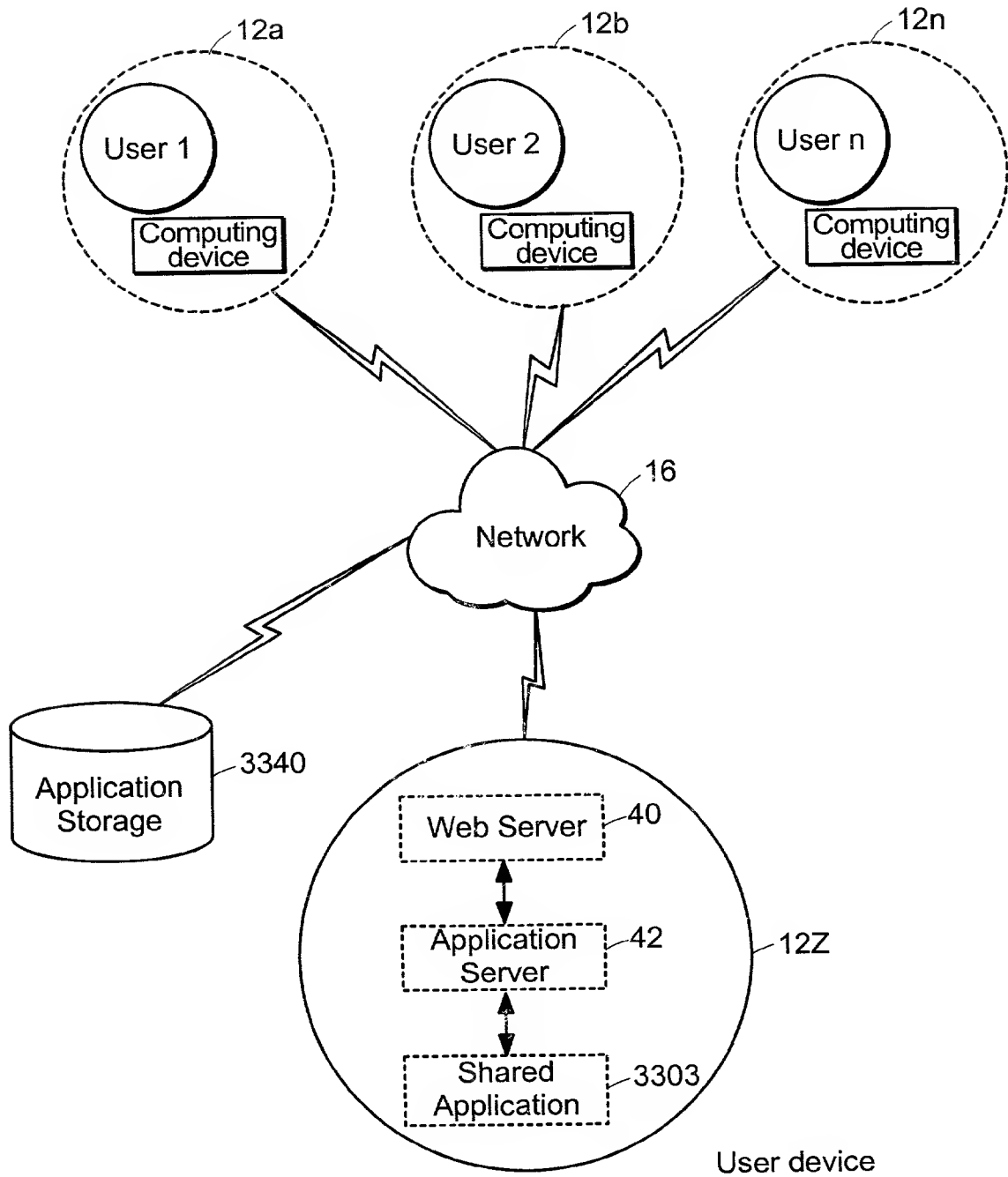


FIG. 33



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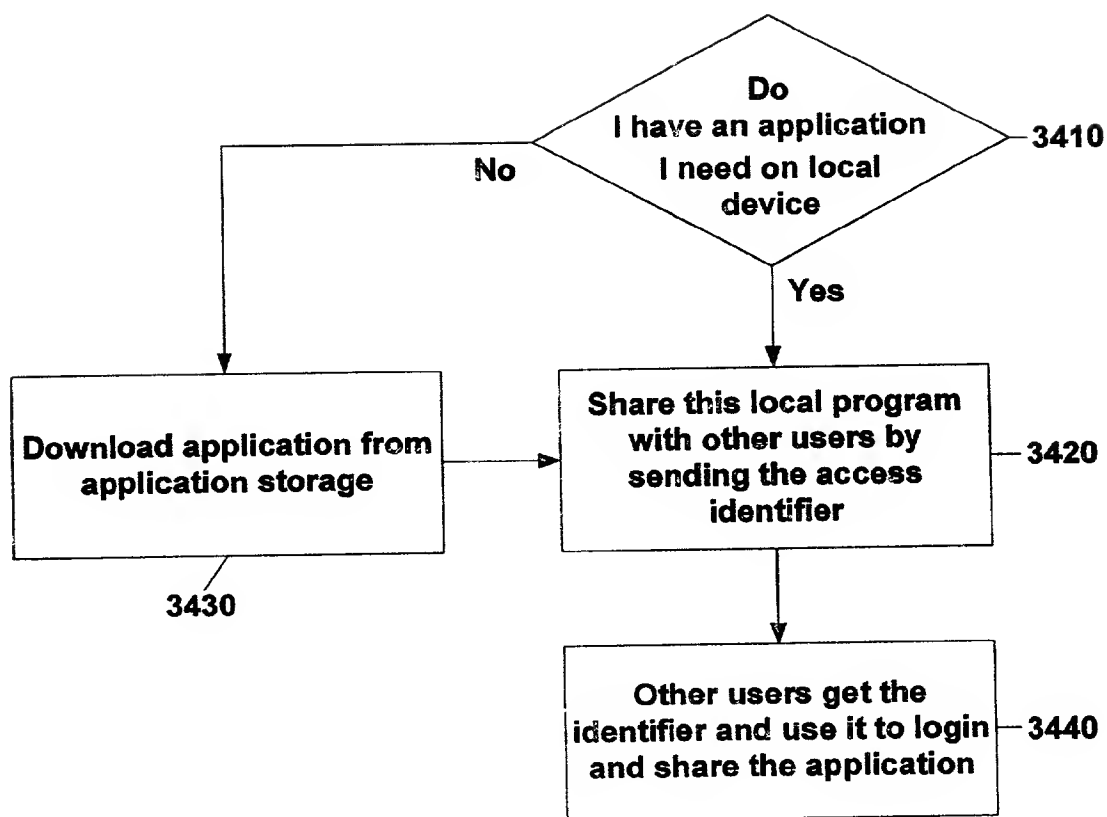
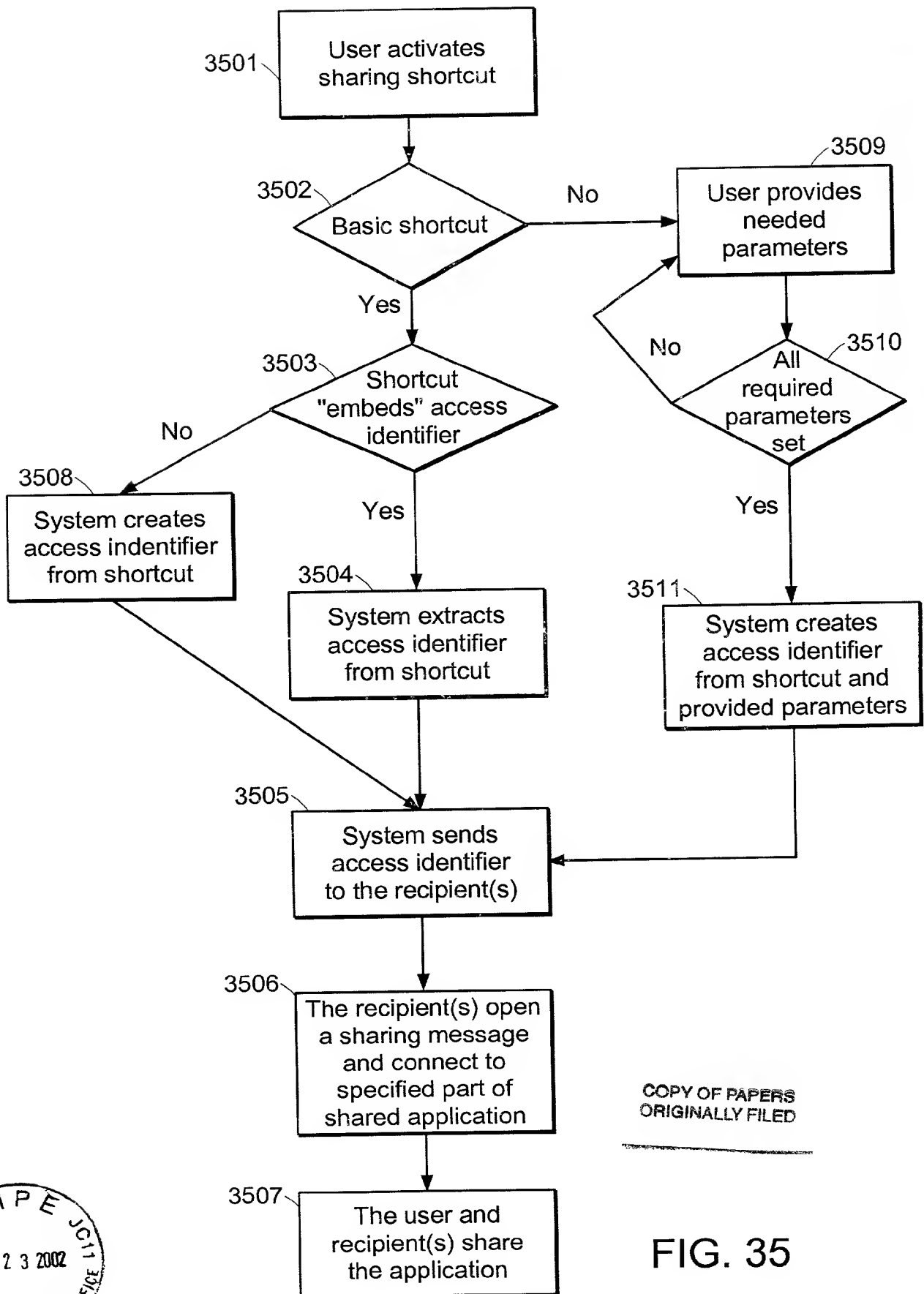


FIG. 34



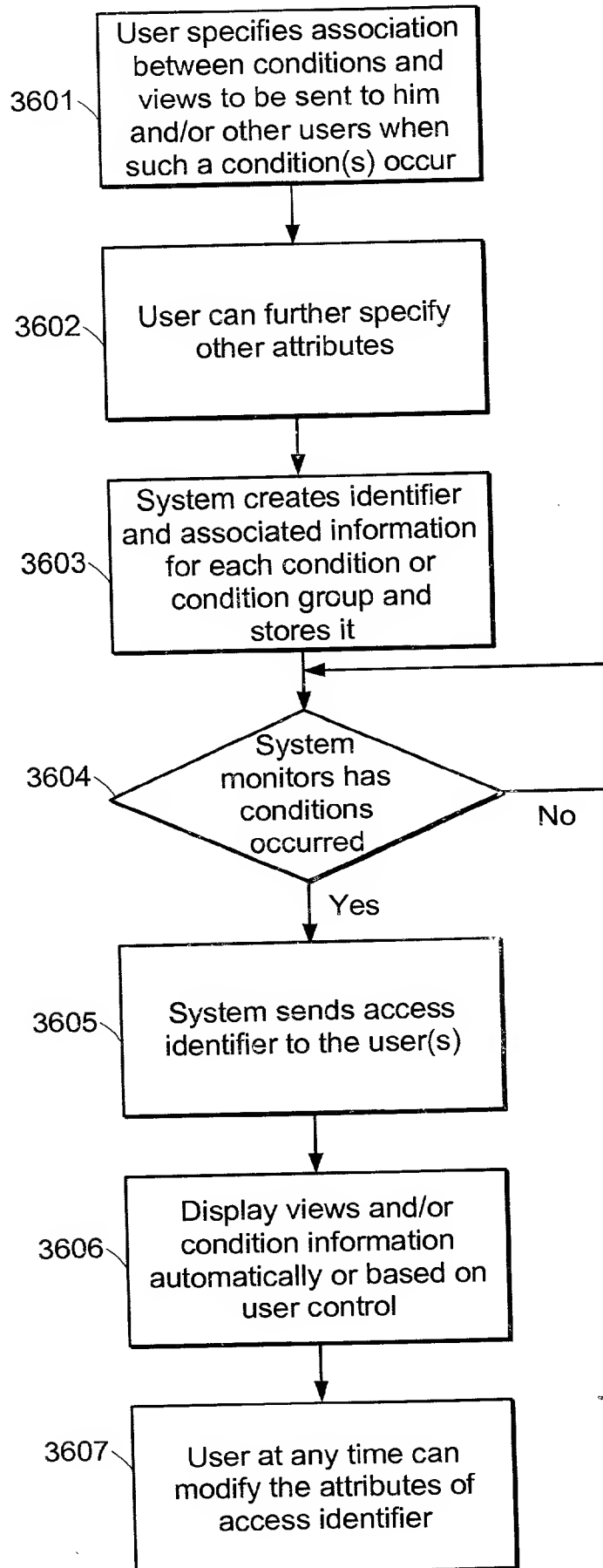
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FIG. 35





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FIG. 36



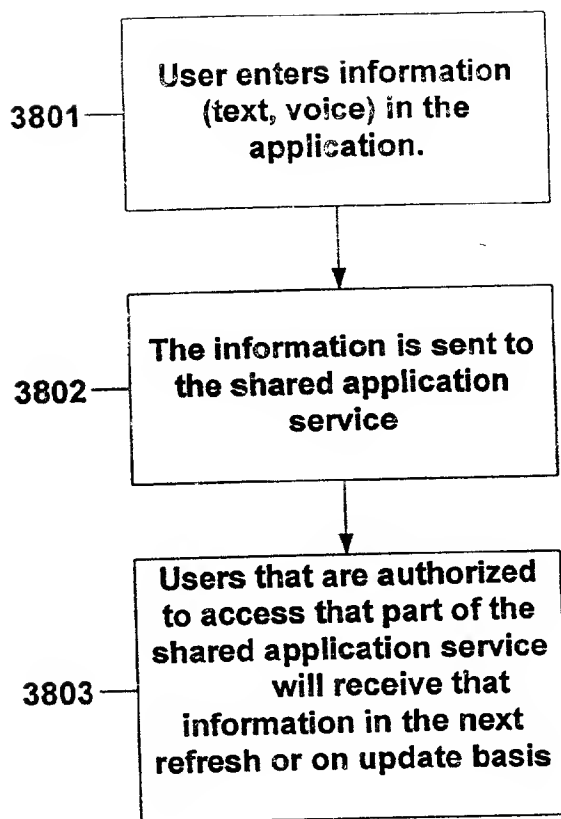


FIG. 38

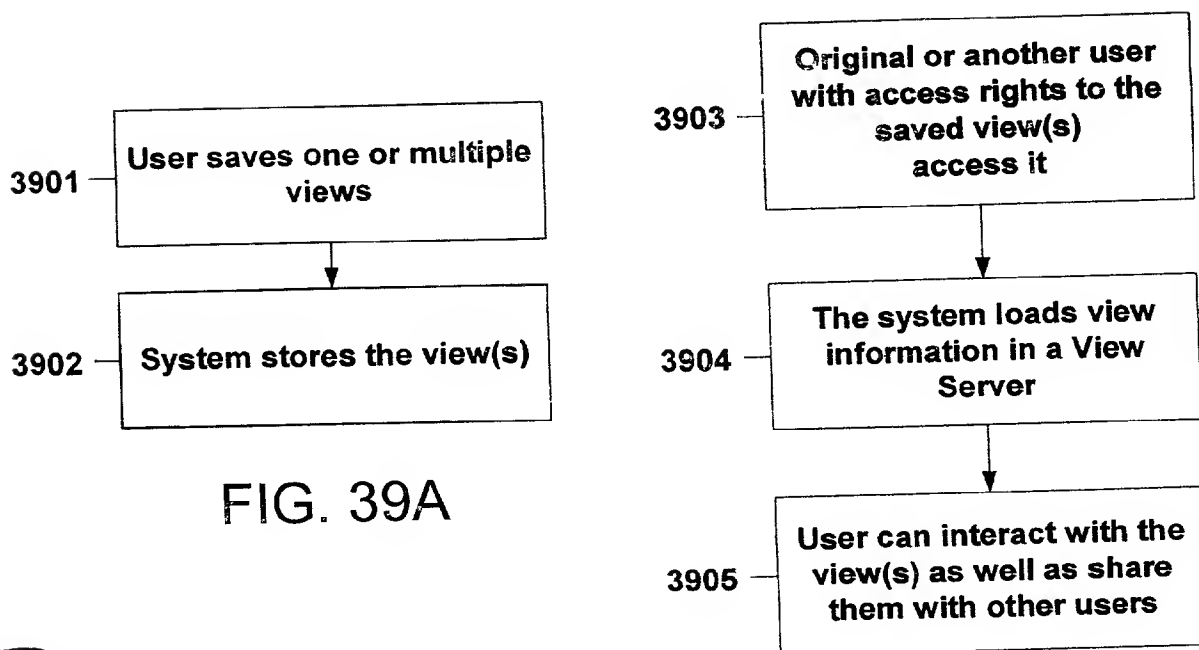


FIG. 39A

FIG. 39B



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4001

{	{	{	{
A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
Text5	800	700	250
Text6	850	900	600
Text7	800	400	200
TOTAL	5850	3100	1950

4010

FIG. 40A

4002

4003

4003A

{	{	{	
B	C	D	
500	100	200	
700	500	100	
800	1100	450	
850	900	600	
1100	500	600	
TOTAL	3100	1950	

4020

4006

FIG. 40B

{	{	{	
B	C avg	D	
500	100	200	
700	500	100	
800	550	450	
850	900	600	
1100	250	600	
TOTAL	3100	1950	

4030

FIG. 40C



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{	{	{	{
A	B	C	D
Text1	1100	200	150
Text3	1100	300	450
TOTAL	2200	500	600

FIG. 40D

{		{
D	B	C
100	700	500
150	1100	200
200	1300	500
250	800	700
450	1100	300
600	850	900
TOTAL	5850	3100

FIG. 40E



4101

{	{	{	{
A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
Text5	800	700	250
Text6	850	900	600
Text7	800	400	200
TOTAL	5850	3100	1950

4110

FIG. 41A

4102

{	{	{
B	C	D
500-750	600	300
750-1000	2000	1050
1000-1250	500	600
TOTAL	3100	1950

4120

4003

FIG. 41B

{	{	{
B	C avg	D
500-750	300	300
750-1000	666.67	1050
1000-1250	250	600
TOTAL	3100	1950

4130

FIG. 41C

A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
Text5	800	700	250
Text6	850	900	600
Text7	800	400	200
TOTAL	5850	3100	1950

- 4210

4202

*	*	*	*
A	B	C	D
Text2	500	100	200
Text4	700	500	100
Text5	800	700	250
Text6	850	900	600
Text7	800	400	200
TOTAL	3650	2600	1350

- 4220

4203

*	*	*	*
A	B	C	D
Text2	500	100	200
Text4	700	500	100
Text5	800	700	250
Text7	800	400	200
TOTAL	2800	1700	750

- 4230

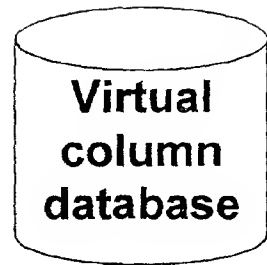
FIG. 42C

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A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
TOTAL	2700	600	800

4310



4315

FIG. 43A

A	B	C	D	M
Text1	1100	200	150	125
Text2	500	100	200	175
Text3	1100	300	450	100
TOTAL	2700	600	800	400

4320

FIG. 43B

A	B	C	D	M
Text1	1100	200	150	125
Text2	500	100	200	175
Text3	1100	300	450	100
TOTAL	2700	600	800	400

4330

FIG. 43C

A	B	D	M
Text1	1100	150	125
Text2	500	200	175
Text3	1100	450	100
TOTAL	2700	800	400

4340

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FIG. 43D



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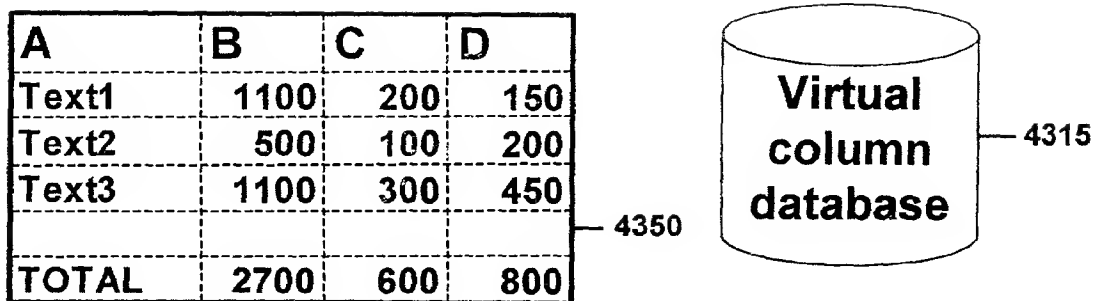


FIG. 43E

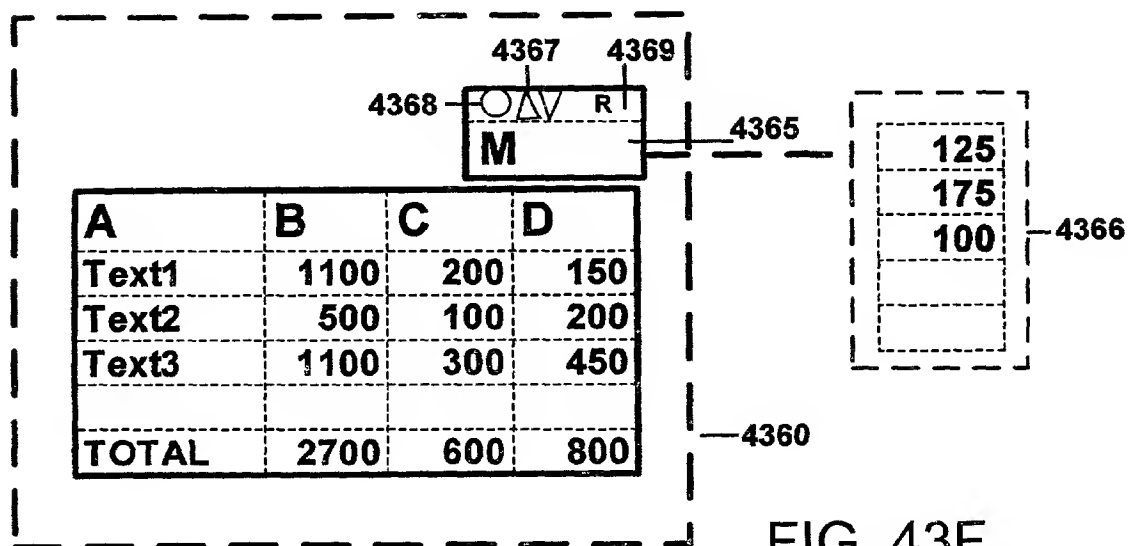


FIG. 43F

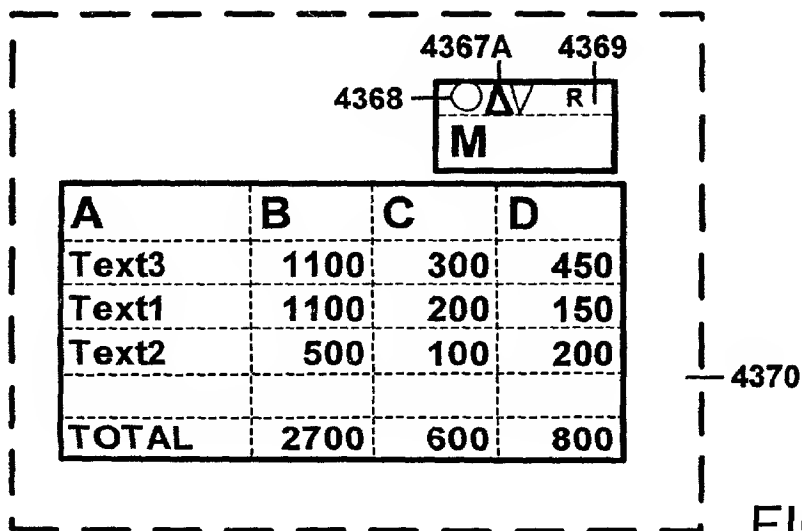


FIG. 43G

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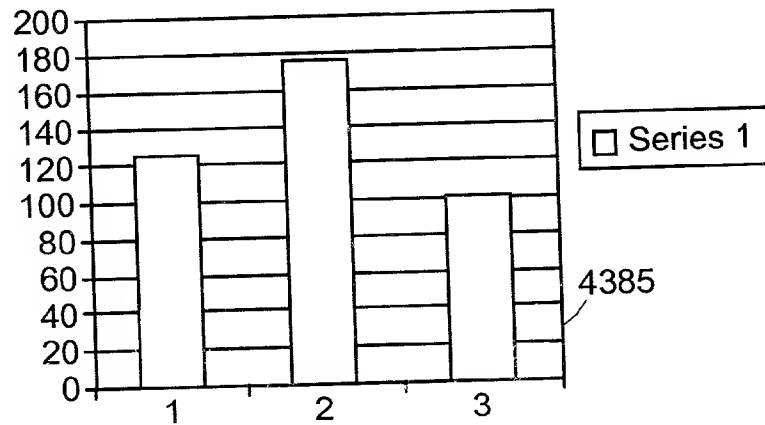
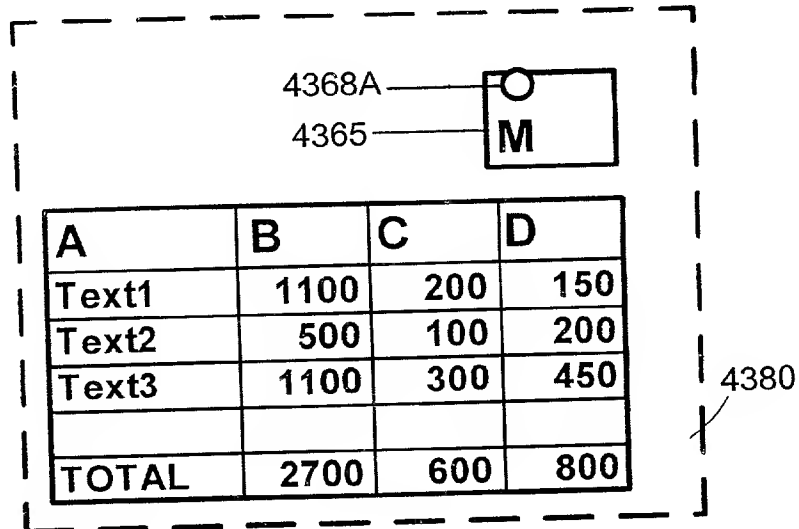


FIG. 43H

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A	B	C	D	M
Text1	1100	200	150	125
Text2	500	100	200	175
Text3	1100	300	450	100
TOTAL	2700	600	800	400

4390

FIG. 43I



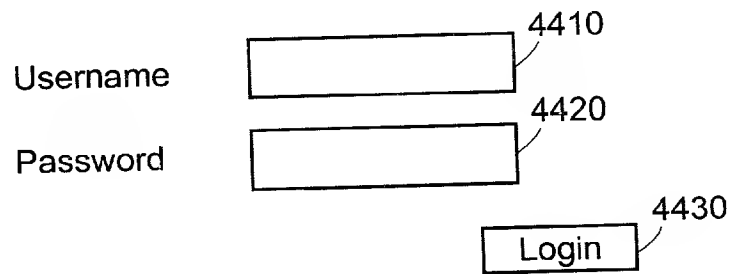


FIG. 44A

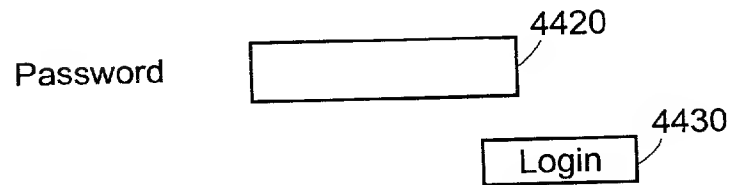


FIG. 44B

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4501

o	o	o	o
A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
TOTAL	3400	1100	900

4510

FIG. 45A

4502

4503

o	O	o	o
A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
TOTAL	3400	1100	900

4510

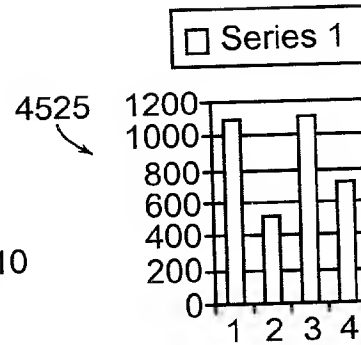


FIG. 45B

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4501

4504

o	o	o	O
A	B	C	D
Text1	1100	200	150
Text2	500	100	200
Text3	1100	300	450
Text4	700	500	100
TOTAL	3400	1100	900

4510

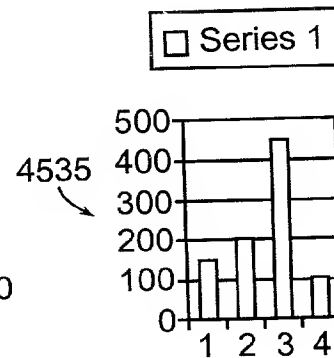
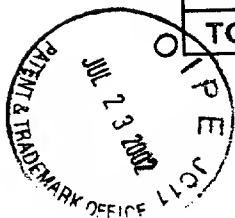


FIG. 45C



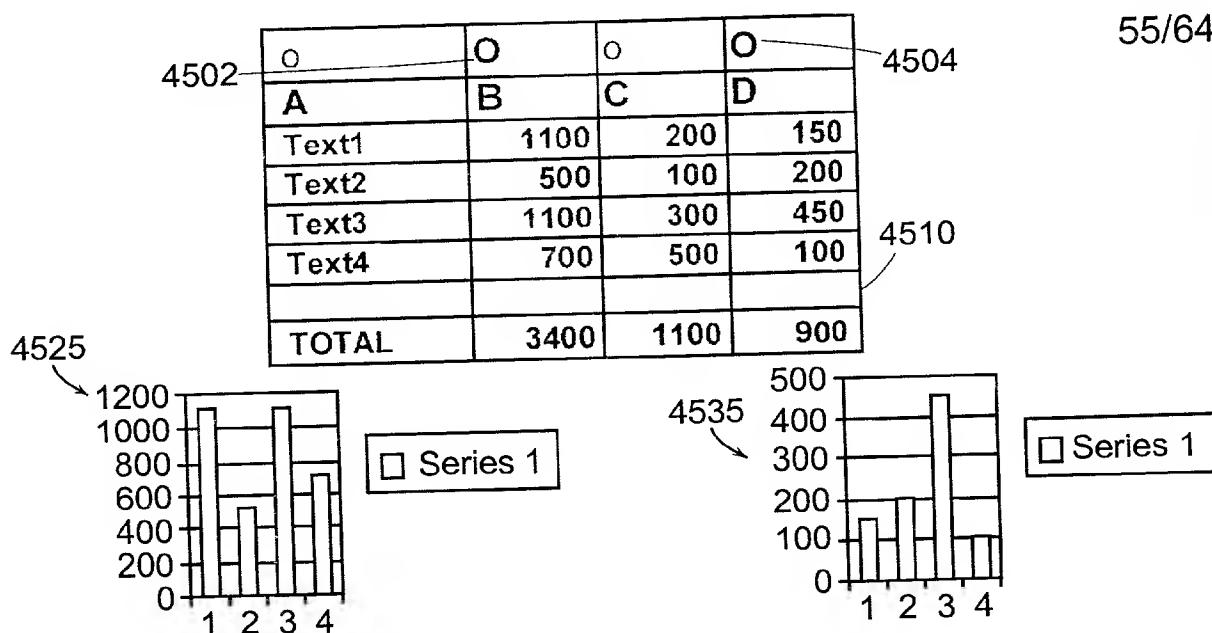


FIG. 45D

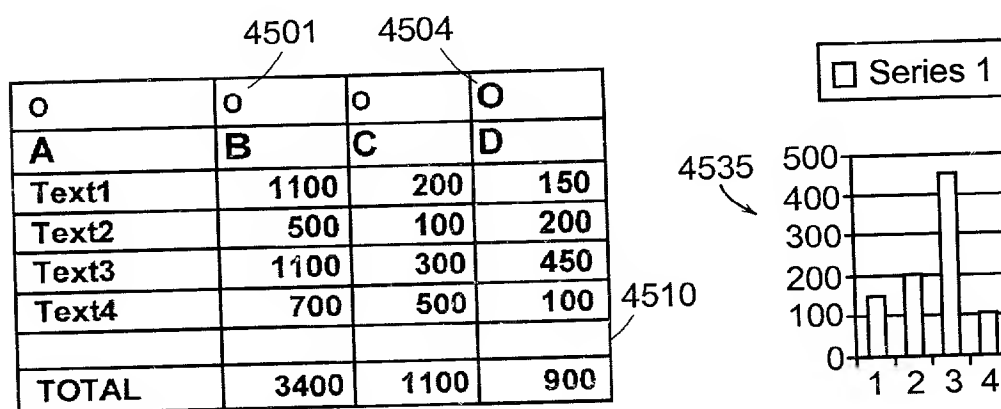


FIG. 45E

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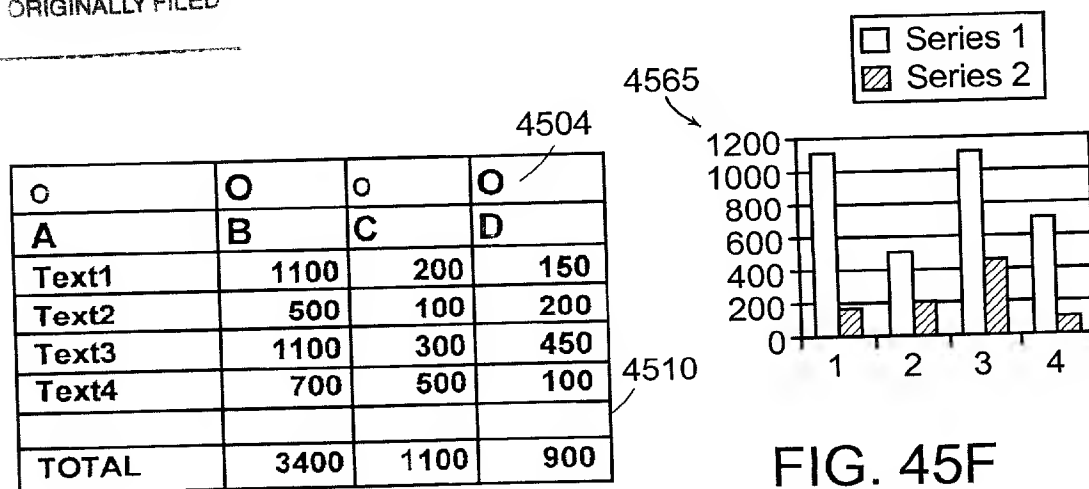


FIG. 45F



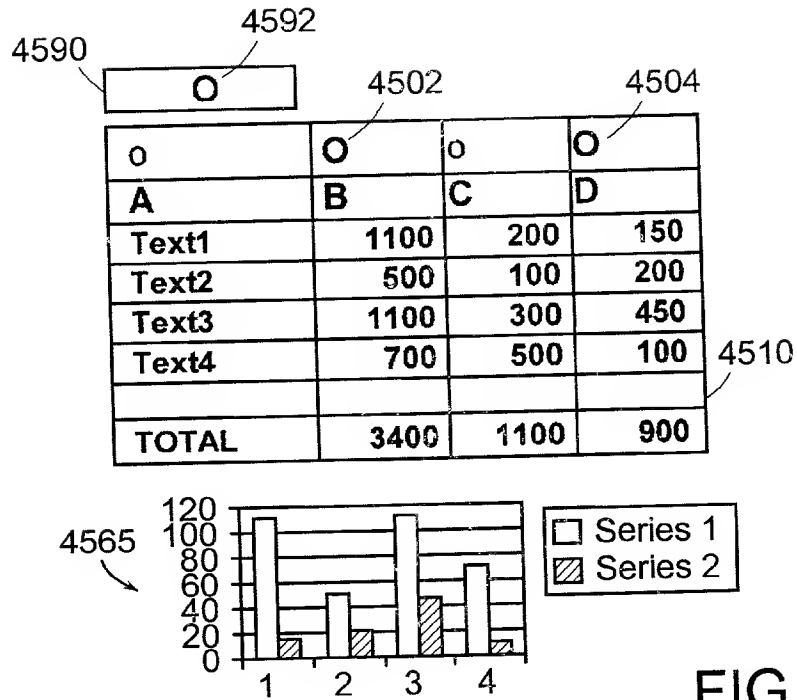


FIG. 45G

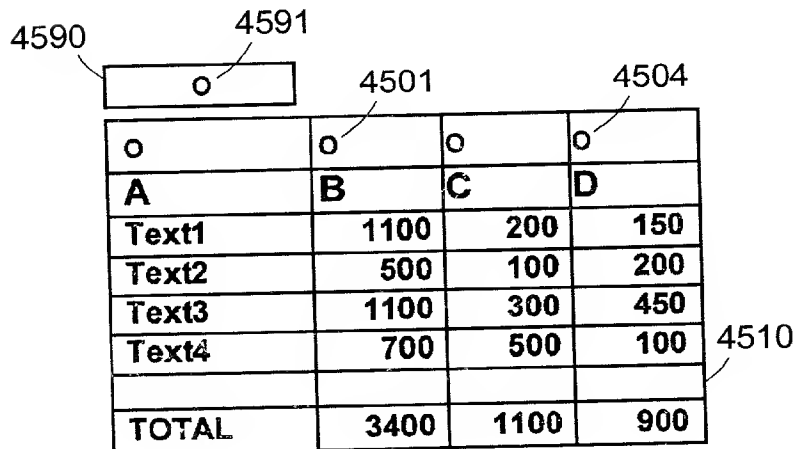





FIG. 45H

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4603

4602




 A	 B	 C
Text1	2/15/99	1000
Text2	3/12/99	3500
Text1	3/12/99	1800
Text1	2/15/99	1500
Text1	5/20/99	500
Text2	3/12/99	2000
Text1	2/15/99	1000
Text2	3/12/99	3500
Text2	6/8/99	1000
Text2	4/10/99	2000

4610

FIG. 46A

4604

4602A




 A	 B	 C
Text1	2/15/99	1000
Text1	3/12/99	1800
Text1	2/15/99	1500
Text1	5/20/99	500
Text1	2/15/99	1000
Text2	3/12/99	3500
Text2	3/12/99	2000
Text2	3/12/99	3500
Text2	6/8/99	1000
Text2	4/10/99	2000

4620

FIG. 46B

4604A

4602A

 A	 B	 C
Text1	2/15/99	1000
Text1	2/15/99	1500
Text1	2/15/99	1000
Text1	3/12/99	1800
Text1	5/20/99	500
Text2	3/12/99	3500
Text2	3/12/99	2000
Text2	3/12/99	3500
Text2	4/10/99	2000
Text2	6/8/99	1000

4630

FIG. 46C




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4604A 4606A

4602A




 A	 B	 C
Text1	2/15/99	1000
Text1	2/15/99	1000
Text1	2/15/99	1500
Text1	3/12/99	1800
Text1	5/20/99	500
Text2	3/12/99	2000
Text2	3/12/99	3500
Text2	3/12/99	3500
Text2	4/10/99	2000
Text2	6/8/99	1000

4640

FIG. 46D

4604A 4606A

4602A

 B	 A	 C
2/15/99	Text1	1000
2/15/99	Text1	1000
2/15/99	Text1	1500
3/12/99	Text1	1800
3/12/99	Text2	2000
3/12/99	Text2	3500
3/12/99	Text2	3500
4/10/99	Text2	2000
5/20/99	Text1	500
6/8/99	Text2	1000




4608

4650

FIG. 46E

4604A 4606

4602A

 B	 A	 C
2/15/99	Text1	1500
2/15/99	Text1	1000
2/15/99	Text1	1000
3/12/99	Text1	1800
3/12/99	Text2	3500
3/12/99	Text2	3500
3/12/99	Text2	2000
4/10/99	Text2	2000
5/20/99	Text1	500
6/8/99	Text2	1000

4608A

4660

FIG. 46F

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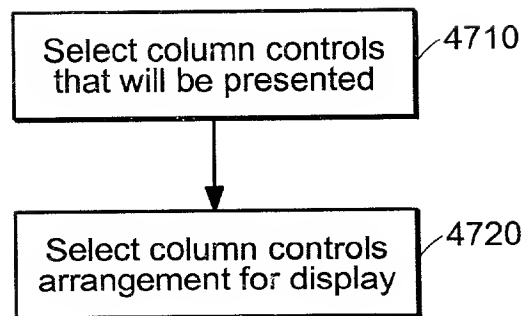


FIG. 47

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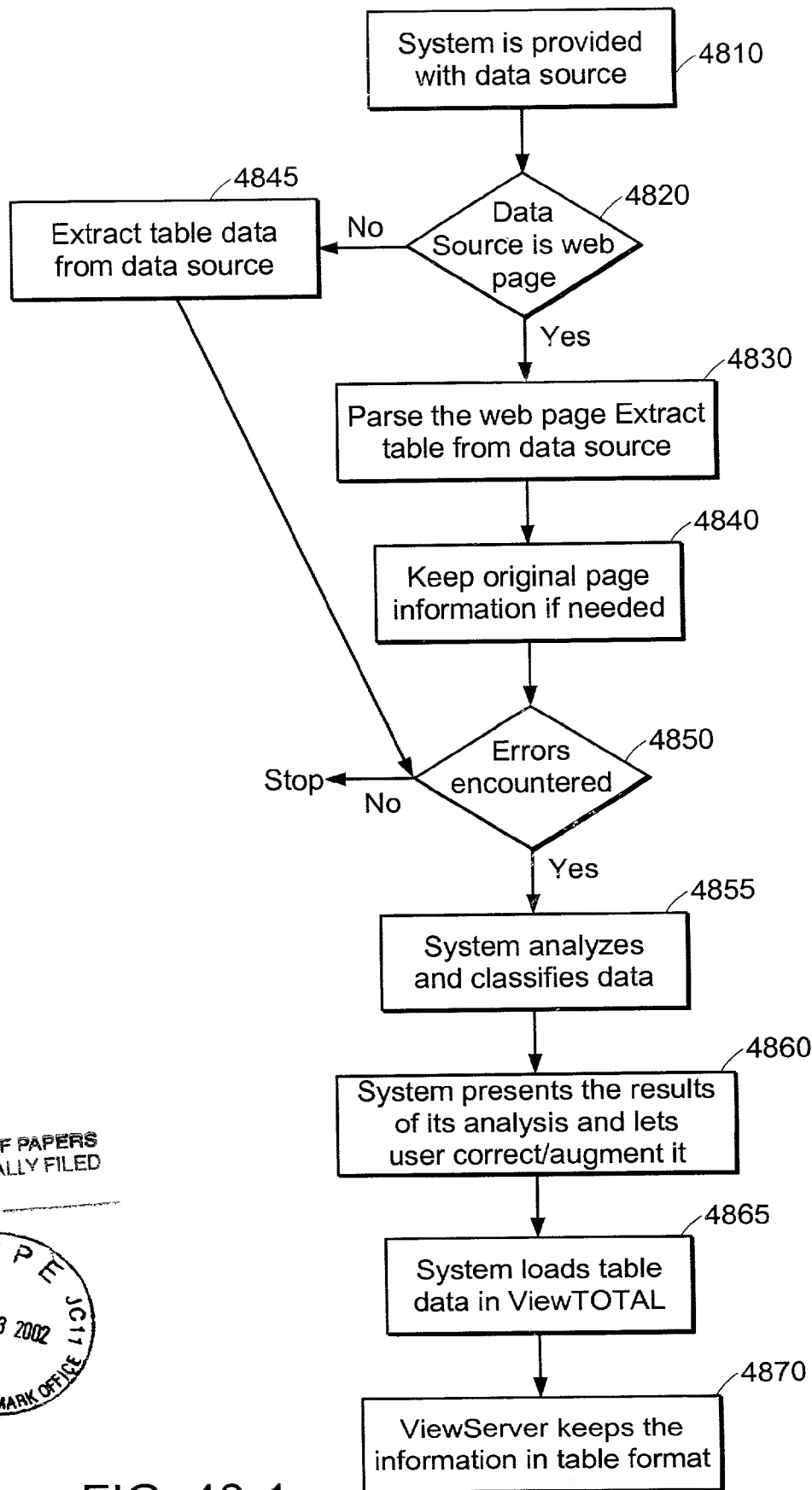
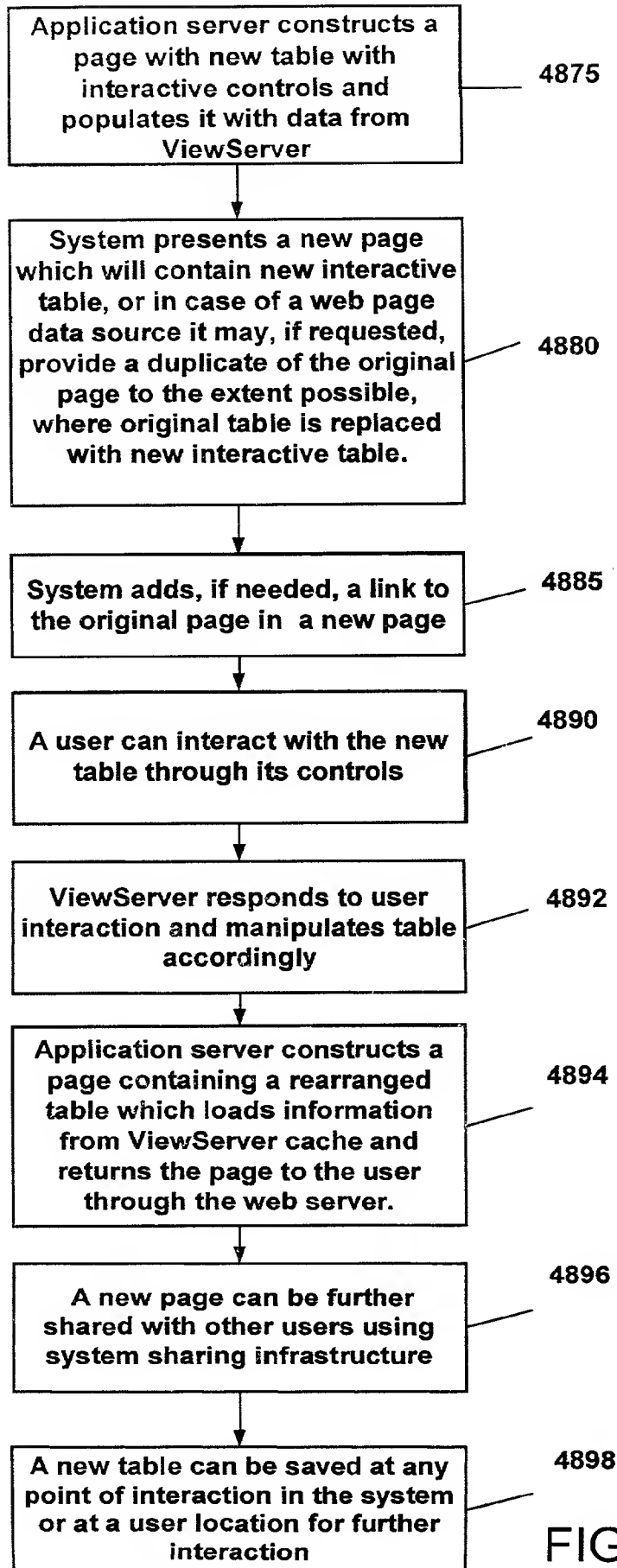


FIG. 48-1

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FIG. 48-2COPY OF PAPERS
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Continued from
FIG. 48-1

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FIG. 48-2

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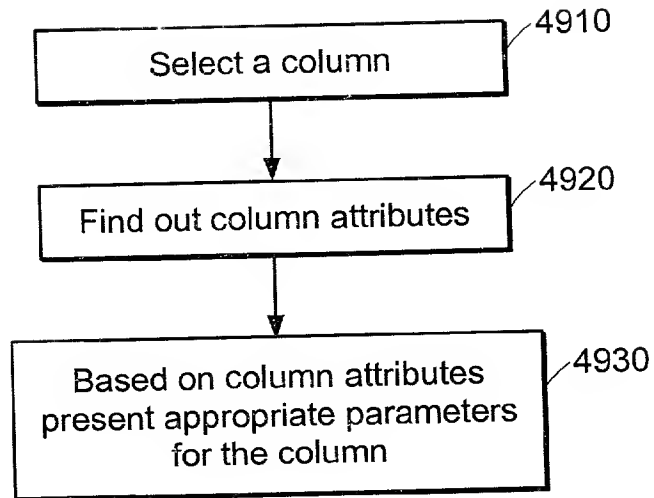


FIG. 49

Aggregation Type			Range		base	0
					range	250

{	{	{
B	C	D
500-750	600	300
750-1000	2000	1050
1000-1250	500	600
TOTAL	3100	1950

FIG. 50



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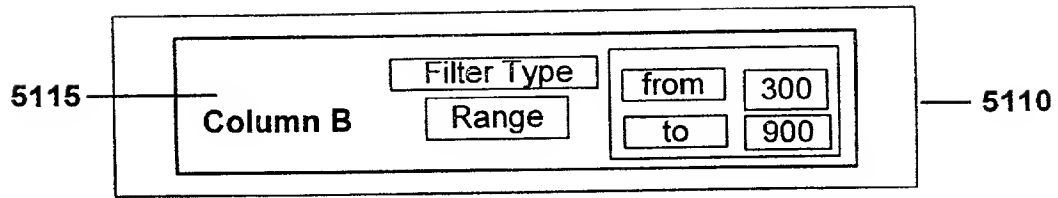


FIG. 51A

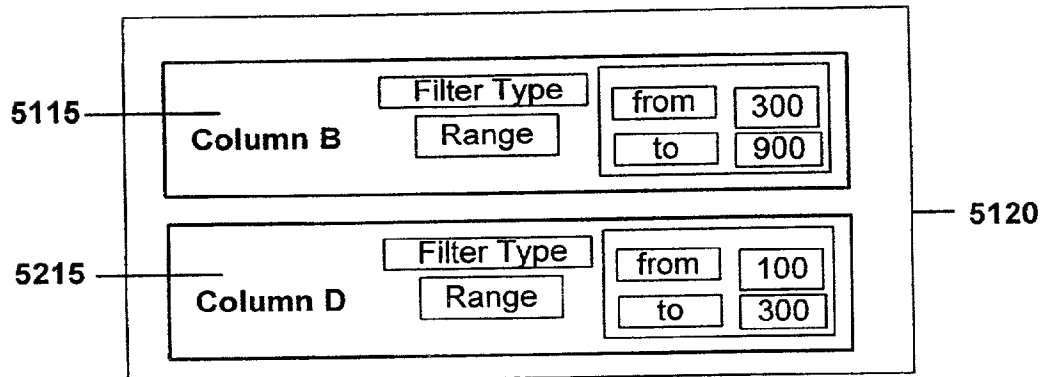
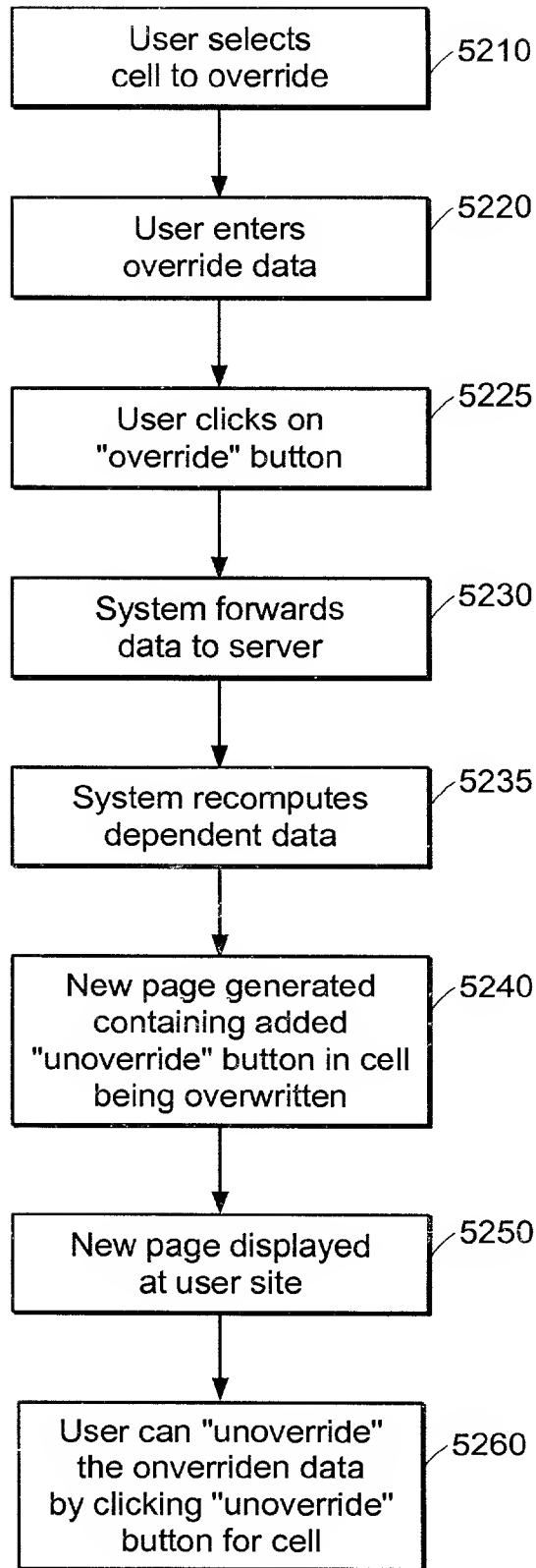


FIG. 51B



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FIG. 52